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# Food security and the humanitarian-development nexus in disaster response.

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## Abstract

Humanitarian intervention is often seen as critical emergency relief, whereas development aid refers to sustaining improvements to wellbeing over time. Humanitarian and development actions, which have different core objectives and different temporal framing, have been historically programmed by different organizational and funding structures. However, there is an obvious bilateral interaction between acute relief and development. Lack of skilled capacity and infrastructure (as example development activities) can significantly impact the quality and speed of humanitarian interventions when disaster strikes. Conversely, neglecting the local context during humanitarian response can disempower local people and not leverage opportunities to build better local development. How the aid system links humanitarian relief with recovery and development to propel aid efficiency and effectiveness is a complex yet urgent agenda. The goal of humanitarian-development nexus (HDN) analysis is to promote humanitarian action that can contribute towards development goals, or at least not hinder them. This research explores HDN constraints by describing how humanitarian action is informed by longer-term food security considerations. Firstly, the literature review defines the concepts of food security (where people have stable access, availability and utilisation of food) and food sovereignty (where the local people define and control food and agriculture systems), as well as food security humanitarian interventions. It then explains the concept of HDN and describes constraints that limit convergence between food security humanitarian action and development programs. Development perspectives can often be excluded from disaster response due to: declining agricultural expenditure; delayed release of post-disaster development financing; lack of responders with appropriate development skills; lack of integrated needs analysis that is informed by local context; and insufficient local participation that can limit local empowerment. Secondly, a case study analyses the food security HDN in response to Cyclones Idai and Kenneth that hit Mozambique in March 2019. Various aid providers were asked their perceptions of the humanitarian interventions through semi-structured interviews. The case study suggests that the HDN could be described as a wall rather than a nexus. A lack of commitment to localisation of humanitarian response is a key driver behind this suggestion. To improve the development outcomes of humanitarian response, a structural shift that allows for shared decision making and action amongst local people, local NGOs, INGOs, UN agencies, government and development agencies is recommended. This would promote effective decision-making related to funding, policy and needs assessment, which would better integrate the needs of the

local people. The research also questions whether food security HDN considers how humanitarian interventions can impact local food sovereignty.

**Keywords**

humanitarian interventions; development goals; humanitarian-development nexus; food security; food sovereignty; disaster; case study; Mozambique; Cyclone Idai; Cyclone Kenneth; semi-structured interview

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With the submission of this thesis, I also acknowledge myself. I mark a key milestone in my journey to use my few skills to in some way contribute towards a better future. I take note to discuss with my new UN CERF colleagues how our 'life-saving criteria' could perhaps do with a critical HDN analysis. I have learned that critical reflection is in fact a valued powerful skill that is under-developed in most organisations that want to change. And with that, I conclude my Masters as a successful adventure and critical turning point in my life.

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# 1. Chapter One: Introduction

My experience in the aid sector began with a six-month internship inside the UN Office for the Coordination of Humanitarian Affairs (UNOCHA) in February 2019. In late March 2019, I watched as the UN and international aid providers responded to Tropical Cyclone Idai, which made landfall in Mozambique on 15 March 2019. I provided some remote support which was just one small piece of the expansive response jigsaw puzzle. The devastating loss of life and disruption to basic services inflicted by the disaster was overwhelming. Six weeks later, Tropical Cyclone Kenneth also made landfall in Mozambique. Both were category four, and completely outside of cyclone season, with Kenneth being the strongest cyclone in Mozambique since modern records began. I was frequently compelled by how unfair it is that "nothing undermines development like disasters" (UNISDR, 2019, p. 12) and wondered at the ability of acute, humanitarian aid to help create a new and better future for survivors. And thus, this research was conceived to better understand constraints that limit how humanitarian action can contribute towards development after a disaster.

The OECD (2014, p. 1) describe that humanitarian action "saves lives, alleviates suffering and maintains human dignity during and in the aftermath of man-made crises and natural disasters", while also serving "to prevent and strengthen preparedness for the occurrence of such situations". It can be compared to the field of development, which the UN (2019, p. 1) frame as "a multidimensional undertaking to achieve a higher quality of life for all people. Economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development." Development aid was historically channelled between governments to strengthen developing states, however when this became increasingly bifurcated, humanitarian aid emerged to focus on saving lives, often working around governments to fulfil this duty (Mosel & Levine, 2014). Humanitarian action can be summarised as critical emergency relief and recovery, whereas development aid refers to sustaining improvements to wellbeing over time.

Humanitarian and development aid sectors are undergoing severe crises. Decreasing confidence in the multilateral system, decline in global aid funding against increasing needs, and climate change induced increase in frequency and severity of disasters all contribute to the crises situation (IASC, 2016). In response, there is a drive to improve aid efficiency and effectiveness, whilst both humanitarian and development actors slowly mobilize in an attempt to realize the

ambitious Agenda 2030 and Global Sustainable Development Goals (SDGs). However, separate organizational and funding structures still divide the planning and monitoring of international humanitarian and development programs.

Despite institutional fragmentation, there are clear bilateral interactions between humanitarian and development goals. These interactions are referred as the humanitarian development nexus (HDN) (Gómez & Kawaguchi, 2018). Neglecting local context during humanitarian action, for example, can impact empowerment of local people and can often work against community development frameworks that some development actors have spent years establishing. A key question that surfaces through the HDN is how the aid system can better link humanitarian relief, rehabilitation and development (LRRD) structures to propel effectiveness.

The main purpose of this research is to explore the HDN and its main constraints in humanitarian response to disasters. More specifically, this research focuses on the impact of humanitarian interventions on longer-term food security. This focus is driven by an understanding that food systems are fundamental to both sustenance and development: they affect physical, social and economic wellbeing, and improvements to food systems can reap enormous improvements for individual and community wellbeing.

The research aims to describe the food security HDN in humanitarian response to disasters and investigate its main constraints. Firstly, it explores how humanitarian interventions can impact the HDN for food security through a review of literature that examines the link between humanitarian interventions in response to large-scale natural disaster and long-term food security. It presents key constraints and opportunities in the food security HDN.

Secondly, this research exemplifies the literature review through a case study. Here, the food security response to Cyclones Idai and Kenneth (also referred to as "The Cyclones"), which hit Mozambique in March 2019, is analysed in the context of the HDN. This case study uses publicly available documents, as well as the experiences and reflections of a small panel of responders to the Cyclones. A case study describing a contemporary large-scale response is a useful checkpoint to reflect on the changing nature of emergency response mechanisms and the role of development perspectives. Overall, this study is relevant to academics and practitioners who are charged with the difficult challenge of reengineering the aid system in order to meet today's humanitarian needs in a complex global development environment.

Following this Introduction, *Chapter Two: Food security and the humanitarian-development nexus* introduces the concepts of food security, including the vital role of agriculture. Key humanitarian interventions utilised in disaster response are then identified, including a focussed discussion on food aid, cash grants and seed aid. Next, the HDN for natural disaster response is described and food sovereignty, the right of people to define their own food and agriculture systems, is introduced as a key concept to a food security HDN. Finally, key constraints that inhibit greater HDN alignment are presented.

The next three chapters are dedicated to the case study. *Chapter Three: Mozambique and Cyclones Idai and Kenneth* provides a brief background on the geographical and historical contexts in Mozambique, as well as an overview of food security before the disaster. This Chapter finishes with a description of the main impacts of the Cyclones on the country.

*Chapter Four: Methodology to investigate the food security HDN in response to the Cyclones* outlines the qualitative methodology applied in order to meet the research purpose. Specifically, this chapter describes the semi-structured interviews conducted with various aid providers regarding the food security humanitarian interventions.

*Chapter Five: Analysis of the food security HDN in response to the Cyclones* reviews some of the food security response documents and describes the response to the semi-structured interviews. This chapter first describes the impact of the Cyclones on food security. It then presents the food security humanitarian response in the initial and the recovery periods. Finally, the perspectives of the respondents regarding the key constraints to an effective food security HDN are reviewed.

*Chapter Six: Discussion - a humanitarian-development wall rather than a nexus* aims to combine reflections from the literature review and case study to summarise constraints that limit greater alignment between disaster response and long-term food security. The case study reveals key insights to address what may be described as a wall rather than a nexus between humanitarian interventions and development goals, especially in terms of localisation of humanitarian response. The findings from the case study are contrasted against the literature review, showing areas where humanitarian and development interventions could benefit from

further alignment. Opportunities that may help overcome these constraints and improve the development outcomes of humanitarian response are then reflected upon.

# 2. Chapter Two: Food security and the humanitarian-development nexus

## 2.1. Introduction

Being undernourished is "the outcome of insufficient food intake or repeated infectious diseases. It includes being underweight for one's age, too short for one's age, dangerously thin for one's height and deficient in vitamins and minerals (micronutrient malnutrition)" (UNICEF, 2006, p. 1). Specifically, "stunting" is an irreversible condition where chronic malnutrition in children leads to physical and cognitive growth disorders. "Governments should actively prioritize addressing the nutrition issue by promoting and investing in nutrition sensitive agriculture and committing to increase national budget allocation to nutrition specific challenges" (CARE, 2019, p. 1).

An estimated 820 million people are undernourished within which 113 million suffer acute hunger (FAO, 2019a), meaning extremely low weight to height ratios, severe visible wasting or nutritional swelling and fluid retention (WHO, 2006). Undernourishment and acute hunger are often the brutal consequences of sustained exposure to moderate or severe food insecurity, a reality for almost 2 billion people (FAO, 2019a). There are strong inter-relationships between hunger, food security, humanitarian response and development. This chapter firstly introduces key food security concepts. This includes the vital role of agriculture, the African Green Movement as an example of contemporary mainstream agricultural development. The narrative then shifts to key food security humanitarian interventions commonly utilised in disaster response, with a focussed discussion on food aid, cash grants and seed aid. Next, the HDN for natural disaster response is described. Food sovereignty, an alternative development movement where people control their own food and agriculture systems, is then introduced as a key part of a food security HDN. Finally, key constraints that inhibit greater HDN alignment are summarized.

## 2.2. Food security

Food security is achieved "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO, 2017, p. 6). It is composed of four core pillars: (1) *availability* of food (both quantitatively and qualitatively) required to nourish the community,

sourced from local production, stock, or imports; (2) *access* to food entitlements and a nutritious diet, including having capacity to purchase; (3) *utilization* of food through diet, water, sanitation and healthcare; and (4) *stability* over time of food availability, access and utilization (FAO, 2006; Habiba, Abedin, Hassan & Shaw, 2015). When this network of food production and consumption conditions are met, a community is considered to be food secure.

A vital component of food security is agriculture. It encompasses "farming, herding, livestock production, fishing/aquaculture, as well as cultivating and harvesting of food resources from water, trees, shrubs" (OECD, 2004, p 1). Effective agricultural policy for food security includes establishing political stability, good governance, innovating farming methods, establishing agricultural markets and economic links, and advancing storage and transport networks (Diriye, Nur and Khalif, 2014). In Sub-Saharan Africa, 60 percent of people sustain their livelihoods from agricultural outputs, of which smallholder farmers account for 80 percent of all farms and 75 percent of all people living in poverty (Trujillo & Baas, 2014). WFP (2009) present five basic elements that sustainable smallholder farming communities need: (1) assets (e.g. land, machinery, water); (2) markets (e.g. infrastructure, communications); (3) credit (e.g. for agricultural inputs); (4) knowledge; and (5) risk management (e.g. social security, disaster resilience).

A discussion of agricultural development needs to also acknowledge the escalating impacts of climate change. Global geographic inequality leads to many agriculture-dependant countries suffering the greatest exposure to natural disasters, making them extremely vulnerable to high-intensity climate-related disasters. Trujillo and Baas (2014) report that 22 percent of damages from natural hazards is absorbed by damages to agricultural assets and declines in crops, livestock and other agricultural outputs. They have also found that indirect losses from harvests in seasons following disasters can be twice as high as the direct losses, which has significant impact on security and stabilized access to food in the long term.

The multidimensional nature of agricultural policy means food security is subject to heavy influence from political, economic, social, and geographical power structures embedded in both local communities and global society (Kilman & Thurow, 2009). The ability for developed countries, for example, to subsidize food production for export presents a structural competitive disadvantage for developing countries who are subject to restrictive loan conditions (WFP, 2009). Along the same lines, trade negotiations reveal power inequalities that limit the ability

for geopolitically vulnerable countries to dramatically reduce food insecurity. The agreement between a South Korean company and Madagascar, for example, sees half of all arable land leased for 99 years with the only return for Madagascar being farm job creation at low local rates (WFP, 2009).

Other factors that raise levels of insecurity include increasing demands for biofuel inputs, land-grabbing and poverty traps (Renzaho, Kamara & Toole, 2017). FAO's (2019a) most recent State of Food Security and Nutrition in the World Report links escalation of food insecurity to increased severity of climate shocks, greater levels of protracted conflicts, and rising food prices due to weakened global commodity markets. The report emphasizes that economic downturns disproportionately impact areas with high income inequality. Even in some middle-income countries that are dependent on raw commodity trading, inequality harbours deeply embedded social inequalities that limit resilience.

Reflecting the complexity of contributing factors, aid agencies and states address food insecurity in many ways. This includes establishing political stability, good governance, innovating farming methods, establishing agricultural markets and economic links, and advancing storage and transport networks (Diriye, Nur and Khalif, 2014). This technology transfer remains at the heart of mainstream agricultural development agenda, and the African Green Revolution is a fitting example. It seeks to reproduce the touted success of the Asian Green Revolution of the 1990s, supported by public-private partnerships that encourage adoption of new seeds requiring less inputs and reduced chemical use. The Alliance for a Green Revolution in Africa (AGRA), for example, was established by philanthropists to promote: (1) advancements in crop productivity; (2) local development in agricultural science, techniques, business and policies; (3) strong commitment from national governments; and (4) infrastructure, irrigation, markets, and the environment for a revolutionized farm sector supported by strong public-private partnerships (Rockefeller Foundation 2006).

Recently, farmers, scientists and aid agencies have also started promoting sustainable methods to tackle land degradation and improve long-term agricultural productivity (FAO, 2019a). These techniques allow farmers and rural economies to increase crop yields and valuable goods such as firewood and fodder, as well as increase income, promote employment opportunities, and improve resilience to climate related disasters.

Sassi (2018) notes that learning on the role of food aid, food production and sustainable livelihoods has led to a 'twin-track' approach to food security: to strengthen productivity and incomes of vulnerable people whilst also providing direct access to food and social protection for the hungry. Sassi writes that food security policies can also act at the micro level, assessing individual and household incomes and addressing gender inequalities.

A review of the indicators measuring SDG2 (zero hunger) effectively conveys this complex contemporary food security agenda. Along with targets to reduce malnutrition, undernourishment and stunting, SDG2 monitors food production indicators such as agricultural volumes and incidence of productive and sustainable agriculture (UN, 2015). Targets also encompass agricultural export subsidies, food price anomalies, and incomes of small-scale farmers by gender and indigenous status to expose vulnerabilities of high-risk groups. Most cocktails of contemporary food security policies attempt to balance food production, incomes, vulnerability and trade considerations that are layered on top of a foundational belief that international markets will lead to much-anticipated sustained economic growth.

This section to date has given an overview of key elements and influences on food security. The following section drills into to food security interventions utilized by aid agencies in the immediate aftermath of a natural disaster, with specific examination of food aid, cash grants and seed aid.

## 2.3. Food security humanitarian interventions

A sudden-onset emergency where response needs outweigh national capacity necessitates governments to request emergency assistance from the international community. Aid agencies organized into functional clusters coordinate response activities, enabling different actors to collaborate in a coordinated fashion to ensure coherence and efficiency of emergency responses. This section describes the coordination of food security humanitarian interventions, including the importance of joint assessments. The considerations for three noteworthy interventions are then further discussed, being in-kind food distribution, cash grants and seed aid.

The Food Security cluster is responsible for saving lives, providing oversight and coordination of effective and efficient humanitarian food assistance (WFP, 2018). It supports a variety of

activities, as shown in Figure 1 taken from the Humanitarian Charter (Sphere, 2018). Standard 1.1, joint food security assessments, is a critical component of the response and a precursor to determining appropriate response interventions. Assessments enable responders to understand current context and scale of needs, identify high-risk groups and establish the monitoring baseline (Sphere, 2018). They should include the impact on livelihood strategies, assets and coping strategies, and make recommendations on protection and recovery mechanisms. The Charter specifies that markets are crucial to all response clusters, particularly food security and nutrition, and joint food security assessments must include market analysis for recovery that satisfies that industry minimum standards.

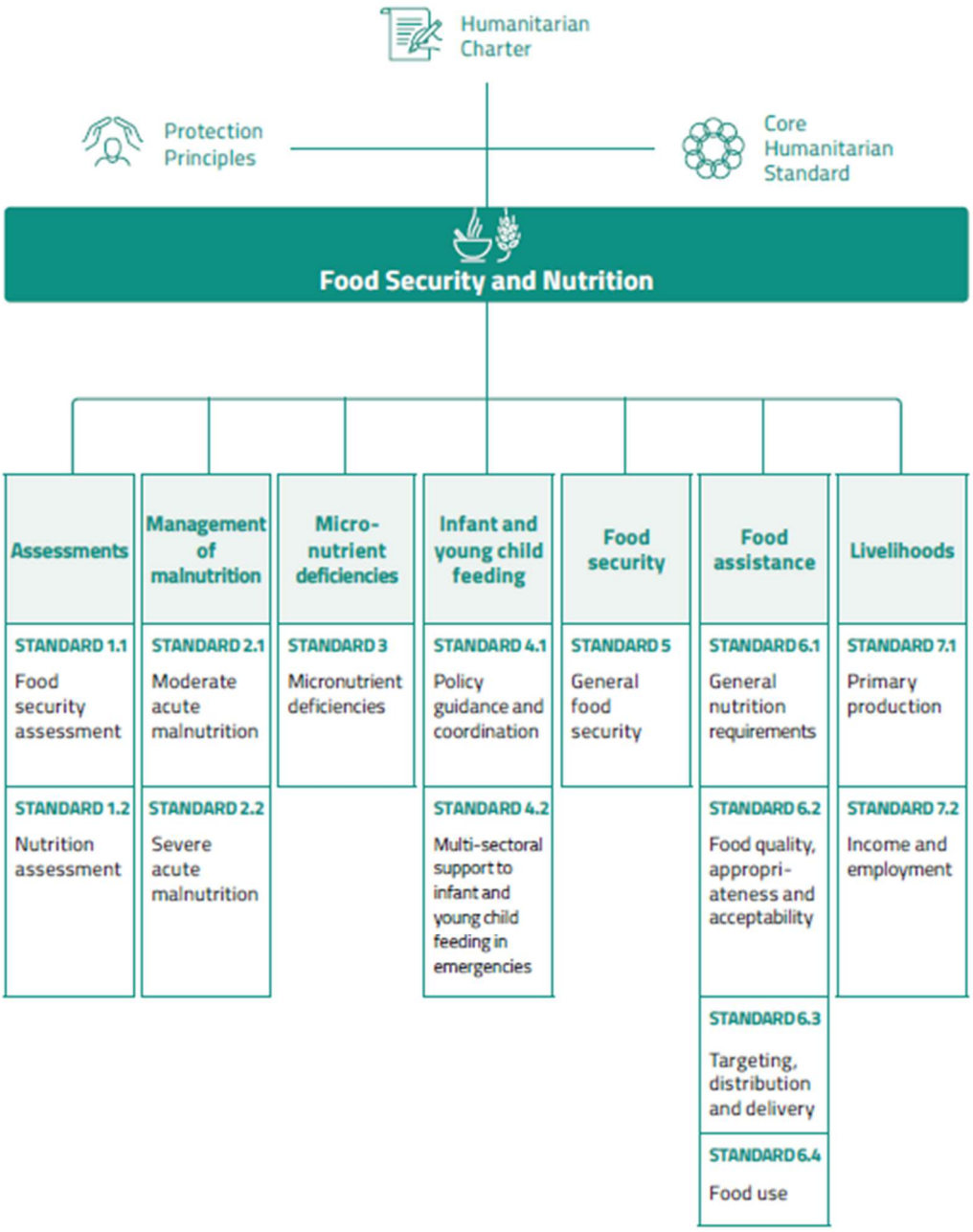


*Figure 1: Food security response cluster activities*

*(Sphere Humanitarian Charter, 2018, p. 165)*

The outputs of joint assessments feed into context-specific planning of humanitarian interventions in order to address immediate and longer-term food insecurity. Maxwell et al. (2008, p. 56-59) provide a comprehensive list of the applicability, advantages and disadvantages of fifteen different food security humanitarian interventions, as summarized in

Table 1. To highlight key programming considerations, three of these interventions will be discussed in greater detail below. These include: (1) in-kind food distribution; (2) provisioning of cash grants; and (3) distribution of seed aid.

### 2.3.1. In-kind food aid

In-kind food distribution (or food aid) is a long-practiced means of fulfilling acute hunger and nutrition needs following disaster. Food aid can be imported, locally or regionally sourced or provisioned from emergency stockpiles, which is becoming increasingly common as a supply buffer for food price shocks or trade disruptions in times of emergencies (Lassa, Teng, Caballero-Anthony & Shrestha, 2019). Historically, it was often the only food security intervention in any emergency response and was regularly channelled under the influence of donors acting in their own political and economic interests (Clapp, 2015). Improvements over time has refined the ability of agencies to identify which groups should be targeted and which scenarios best suit food aid.

In its contemporary use, food aid is considered an effective tool if well-targeted and used as a short-term measure, for example, in situations suffering market breakdowns or stock shortfalls (Maxwell et al. 2008; Diriye, Nur & Khalif, 2014). Lentz, Passarelli and Barrett (2013) also report that imported food aid is more likely to have adequate nutritional value and avoid deteriorating nutritional status in areas where local foods do not meet these criteria. The question of whether communities will develop dependencies is also context specific. For example, Nagoda (2017) found evidence of aid dependency and related agricultural unproductivity in Humla, Nepal. Whereas, Gautam (2019) found in the same region that low donation quantities only satisfied a small proportion of overall food security needs and delivery was inconsistently timed. This deterred the formation of dependency behaviours, and rather acted as a necessary buffer in vulnerable times or empowered farmers to take greater measured risks.

| | Intervention | Intended outcome | Circumstances in which applicable | Potential advantages | Potential disadvantages or harms |
|---|---|---|---|---|---|
| 1 | *General (in-kind) food distribution* | Protect against malnutrition and acute food insecurity;<br>Protect assets | Emergency in which markets are not functioning well or there is an outright food shortfall | Protects access to food<br>Often most readily available humanitarian input | Takes time to arrive<br>Targeting errors can undermine markets |
| 2 | *Food for work (FFW)* | Provide food aid as income guarantee<br>Build or rehabilitate community assets | Where food insecurity is relatively predictable and where vulnerable groups are able to work | Provides work guarantee<br>Builds community assets | Management intensive<br>Labour deficit or illness affected households cannot participate.<br>Factors determining where and when FFW can contribute to assets and recovery are complex, and though it can be effective,<br>FFW is not a 'magic bullet'. |
| 3 | *Monetisation* | Control food price spikes or put additional supplies into food market | Where food supplies cannot react to demand, or to counter hoarding by traders | Counteracts hoarding and price spikes for market-dependent clientele<br>Does not require targeting | Timing errors can undermine markets, and timing can be tricky.<br>Recent examples are rare, but it should not be ruled out as an option. |
| 4 | *Cash grants* | Protect food security, other basic need and enable livelihood recovery<br>Provide greater choice<br>Supports market recovery | Where basic needs are available, markets will respond to demand, and there is no major risk of price inflation | Protects choice and dignity of recipients, and access to needs<br>Less logistics<br>Stimulates market recovery | Requires some kind of money transfer system<br>Risk of inflation if analysis is not done correctly |
| 5 | *Cash for work* | Same as cash grants, but also where community assets can be built or rehabilitated | Same as cash grants, and where vulnerable groups are able to work | Same as grants<br>Builds community assets | Same as food for work |
| 6 | *Vouchers* | Provide targeted assistance but with greater choice than in-kind transfers<br>Supports market recovery | Goods available in market<br>Traders will respond to demand<br>Market recovery is an objective | Promotes market recovery<br>Promotes local purchase<br>Enhances choice | Inflation risks<br>Forgery |
| 7 | *Microfinance* | To protect or rebuild livelihoods<br>Supports market recovery | Functioning markets but perhaps limited access to other livelihood assets | Promotes livelihoods and market recovery<br>Sustainable investment | Requires organization and skilled management |

Table 1: Emergency food security interventions
(Maxwell et al., 2008, p56-59)

| | **Intervention** | **Intended outcome** | **Circumstances in which applicable** | **Potential advantages** | **Potential disadvantages or harms** |
|---|---|---|---|---|---|
| 8 | *Remittances* | Support access to basic needs and livelihood protection/recovery | Where extended family members are outside the affected area and funds can be remitted | Enhances options<br>Supports both basic needs and livelihood recovery | Requires money transfer system or freedom of movement<br>Often not something an agency can support |
| 9 | *Barter shops* | Support home production of food and recovery of agricultural livelihoods | Where assets have been lost or consumed, and where potential for agricultural productivity remains high | Makes purchase possible where case economy broken down | Heavy investment<br>External management |
| 10 | *Seeds and tools* | Support home production of food and recovery of agricultural livelihoods | Where assets have been lost or consumed, and where potential for agricultural productivity remains high | Enables agricultural recovery | Presumes farmers are the vulnerable group - does not help other groups |
| 11 | *Destocking/ restocking* | Protect livestock assets of pastoralists and agro-pastoralists | Dought and slow-onset pastoral crises where grazing and water resources are insufficient | Enables pastoralists to recover some of the value of livestock<br>Enables faster recovery | Often too little and far too late<br>Requires planning and early warning<br>Requires large investment |
| 12 | *Animal health and nutrition* | Protect health and condition of livestock of core breeding herds | Drought and slow-onset pastoral crises | Preserves core breeding stock in pastoral crisis | Targeting<br>Access<br>Cost |
| 13 | *Supplementary feeding* | Treat moderate acute malnutrition and prevent increase in severe acute malnutrition and mortality | Nutrition crises where global acute malnutrition is widespread | Can reduce risk of mortality and prevent deterioration of nutritional status in vulnerable groups | Many factors commonly reduce impact including high rates of default, poor household food security, absence of adequate general food rations |
| 14 | *Therapeutic feeding* | Treat severe acute malnutrition and prevent mortality | Severe nutrition crises | Prevents/reduces mortality where severe malnutrition is prevalent<br>Community based programmes can achieve better impact than inpatient programmes alone | Requires trained medical staff<br>Food commodities are relatively expensive |
| 15 | *Micronutrient interventions* | Prevent micronutrient deficiencies and protect health | Virtually all emergencies | Can reduce morbidity and mortality in affected populations | Deficiencies are difficult to identify and measure and require a multi-pronged approach |

Table 1: Emergency food security interventions continued
(Maxwell et al., 2008, p56-59)

Despite significant enhancements to technical analysis of food security systems, targeting and delivery of food aid remains subject to miscalculations that can hinder effectiveness. Ineffective management of food aid logistics, such as over-supplied imports or stolen aid, can flood local markets and stall recovery of local and regional markets (Mudzingiri & Chidoko, 2014). In addition, targeting calculations that omit local scenarios when determining food aid recipients and quantities can exclude vulnerable groups such as women, children and people with disabilities (Diriye, Nur & Khalif, 2014). In Mozambique, for example, some women were reportedly forced into prostitution in exchange of food by those in power in the immediate aftermath of Cyclones Idai and Kenneth (Human Rights Watch, 2019). Although still a key component of most humanitarian responses, the complexities of effective food distribution has led agencies to balance food aid with alternative, market-based solutions.

Aid providers are increasingly adopting cash grants provisions that seek to satisfy immediate food needs and allow choice whilst protecting mid-term food security through livelihood recovery. Numerous studies show that enhancing or replacing food aid with cash grants stimulates demand in local food markets and upstream agricultural supply chains (ECHO, 2013; Maxwell et al., 2011; WFP, 2009). Maxwell et al. (2008) describe that cash grants are appropriate when markets are well-functioning and allow disaster-affected people to exercise choice and participate early on the road to recovery. They example the 2004 Indian Ocean tsunami disaster when many lives were lost and infrastructural damage was severe, however food production and markets were swiftly functioning with the support of cash grant programs.

### 2.3.2. Cash grants

Cash grants can generally support more people and reach further than in-kind distributions (Clapp, 2015), although they may not always be the optimal option. The strength of local food systems must be assessed, as adding pressure to unresponsive damaged markets can lead to price fluctuations or reduced purchasing power (Zhou and Hendriks, 2017). Similar to food aid, gender inequalities also require context-specific analysis to understand the likely familial impacts of cash receipts (Maxwell et al., 2008). The technical systems and integration also required to administer cash programmes also might not be immediately available.

However, the potential maturity of integrated cash grant programs can be a potential disruptor to existing 'supply driven' mentality of response (Konyndyk, 2018). Responders across the aid

system using cash grants are faced with the challenge to redefine their evaluation and monitoring mechanisms for accountability and effectiveness. FAO (2019b) now encourages aid agencies to channel cash grants through national social protection systems to leverage efficiencies by aligning with state infrastructure, saving time and reinforcing the state-citizen relationship.

### 2.3.3. Seed grants

As well as feeding the hungry and recovering markets, humanitarian interventions seek to support recovery of local food production. Non-food in-kind donations often include production inputs such as "fishing equipment, veterinary medicines, livestock and tools, as well as reparation of infrastructure such as irrigation systems" (FAO, 2010, p. 16). Other support for recovery includes contributions to environmental rehabilitation and disaster risk reduction (FAO, 2019b). A key part of agricultural recovery, however, is the provisioning of seeds to local farmers in order to secure harvest for upcoming seasons production.

The scale of seed aid distribution as part of disaster response is growing, fuelled by demands to better link relief and development with rapid agricultural recovery. Seeds are critical not just to secure the next seasons' harvest, their control can influence the community's entire food system (Shilomboleni, 2018). Seed aid is relevant when agricultural damage has occured in productive farming areas and locals no longer have access to seed supplies (Maxwell et al., 2008). Similar to food aid, however, assessments are essential to avoid planting of inappropriate seed aid delivery. Sperling and McGuire (2010, p. 197) provide examples of badly targeted seed aid distributions: "long-maturing [seed] varieties [were used] when fast maturing varieties were needed, … [introduction of] serious new weeds... [and] tons of seeds totally unadapted to the stress area". They also found that local farmers were usually knowledgeable regarding effective agro-ecological practices, seasonal variations and adaptation regions, however, are rarely consulted in priority ahead of seed donors or commercial suppliers. CFS (2019) add that agribusiness actors that are often consulted have been known to avoid costing the production, processing and distribution externalities that should be taken into consideration when conducting seed assessments.

Studies in Sahel and the Horn of Africa have found that only a small percentage of seed assessments resulted in post-disaster seed related interventions (FAO, 2015). The Sphere

Humanitarian Handbook (2018) now prescribes standardized seed security assessments (SSSA), availability of case studies and training materials, and establishment of Communities of Practice in high-risk regions. SSSAs should go beyond food security assessments to include: profiling of seed systems at normal times; identifying goals for relief and recovery; understanding functional post-disaster seed channels; distinguishing immediate and longer term needs and capabilities; and matching interventions to priority demands (Maxwell et al., 2008).

Like food aid, the majority of seed security interventions have evolved to encourage market-based responses. Sperling and McGuire (2010) explain that disasters do not always wipe out all seeds, and only a fraction of a harvest is required to meet most small seed security requirements. At the same time, informal seed markets usually recover rapidly after a disaster and their effectiveness should not be dampened by inappropriate donations or formal market interventions. Preferably, responses should also use cash grants to give farmers appropriate access to these markets and improving access to information to enhance decision making regarding suitable crop varieties.

This section has described food aid, cash grants and seed aid as three examples of key food security interventions used in emergency response. The critical role of joint assessments that analyse local context to inform appropriate interventions is clear, which need to continually assess drivers against constraints and inform response accordingly. In the following section, the concept of linking disaster relief, rehabilitation and development is introduced in the context of the 'humanitarian-development nexus'. The discussion notes key constraints in realizing greater alignment between humanitarian response and longer-term food security, before summarizing areas where gains can be made.

## 2.4. Humanitarian-Development Nexus in disaster's response

The linking of disaster phases to promote response activities that do not compromise development became a high-profile issue in the early 1990s, and this has evolved to recent analysis of the 'Humanitarian-Development Nexus (HDN)' (Gómez, 2018). Disaster response has often failed to effectively coordinate interventions from humanitarian and development agencies to embed early disaster risk reduction (DRR) principles or contribute to local development (Osa & Hanatani, 2018). Recovery activity can also lead to existing problems being reinforced, or new problems introduced. Murphy et al. (2018, p. 135) write that

addressing the HDN is: "an urgent agenda. There are few cases where humanitarian response has accelerated human flourishing. Ambition stalls at 'doing no harm', and even this aim is too often missed." This section introduces the HDN in the context of sudden onset natural disaster response.

HDN describes the 'space' in between humanitarian and development programming, which traditionally operate in different governance structures, receive separate funding, and often apply fundamentally different principles in their practice. Market disruption from food aid is a commonly cited example of how HDN divergence can negatively influence local livelihoods (Gómez & Kawaguchi, 2018). In disaster response, aid agencies have traditionally adopted a linear approach that sees interventions moving from life-saving humanitarian action to recovery, rehabilitation and development activities (Osa & Hanatani, 2018). Christopolos (2006) explains, however, that HDN is not only interested in the linear 'continuum' of response phases, but also the 'contiguum' of how concurrent humanitarian and development activities co-exist and interact. Figure 2, adapted from Hanatani, Gómez & Kawaguchi (2018), presents a conceptual view of potential interactions. It shows that linear phases of disaster response overlap together as they progress and peak at different points over time. This confluence conveys the necessity to ensure that HDN activities are strategically co-ordinated to avoid conflicting outcomes and, better yet, designed as foundations for future development.

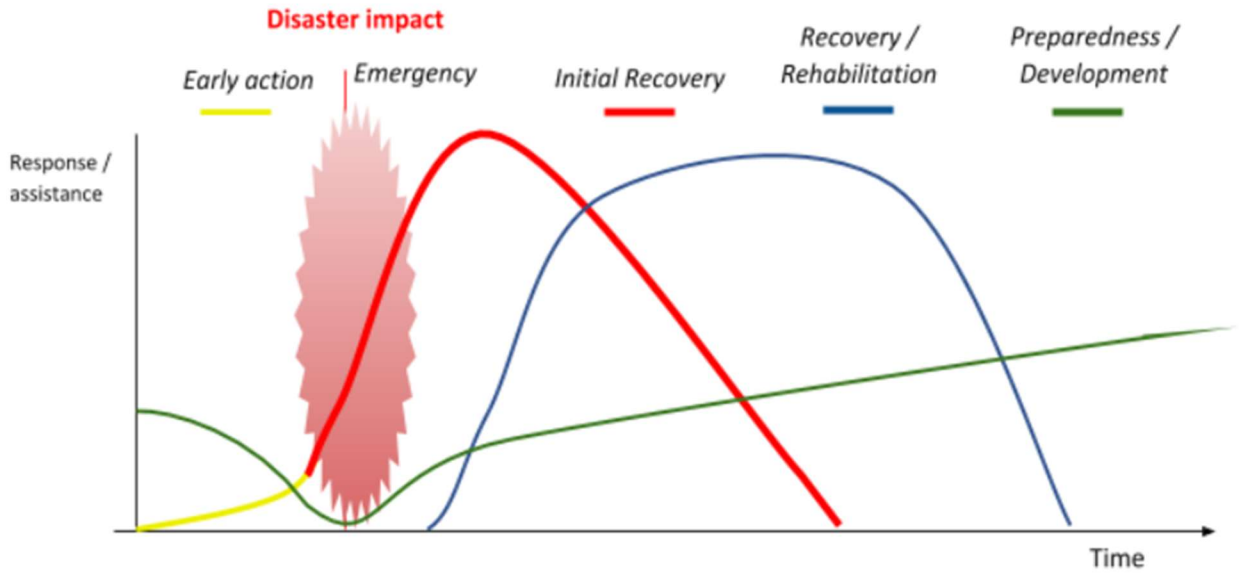


Figure 2: Visual representation of disaster response phases over time
(adapted from Hanatani, Gómez & Kawaguchi, 2018)

There are many international agreements that demand agencies to address HDN. The Sendai Framework for Disaster Risk Reduction 2015-2030, agreed by UN Member States in 2015, includes targets for disaster responders to 'Build Back Better' by enhancing resilience to future disasters (UNISDR, 2015). In addition, Sendai pushes for greater 'localization', where decision making, and execution is decentralized to include local disaster-affected people. HDN and localization are also key components of commitments at the World Humanitarian Summit in 2016 known as the 'Grand Bargain' (IASC, 2016). These international agreements inject a renewed focus on collective outcomes and invite aid actors across the contiguum to transform relationships into partnerships to target shared goals.

However, the goal of the HDN should not merely take the perspective of donors or agencies, but through local governance and communities. Gómez (2018, pg 141) describes that "the ideal role of international donors is to support locals in realizing the continuum of relief, recovery and prevention, not in making their individual projects connected with each other." The HDN is inherently linked, therefore, to increased local control of humanitarian response. In other words, for development goals to be implemented during humanitarian interventions, responders must put local people, and their context, at the heart of response decision making. The next section introduces food sovereignty - the control of food and agricultural systems by local people - and proposes that food sovereignty is a critical aspect of the food security HDN.

## 2.5. Food sovereignty

Food sovereignty is an increasingly prominent alternative development concept which aims to counter political power imbalances in trade negotiations and challenge the universal adoption of resource-intensive food production programmes. The movement was spearheaded by grassroots organizations, such as La Via Campesina in Latin America, reacting to the 2008 food crisis triggered by the Global Financial Crisis (GFC) (Shilomboleni, 2018). Taking a rights-based approach, food sovereignty goes beyond the 'right to food' lens inherent to food security. It claims people have a "right to the social, political, and natural resources that allow them to determine and define their own systems of food production and consumption" (Walsh-Dilley, Wolford & McCarthy, 2016, p. 12).

The six pillars of food sovereignty prescribe that sustainable food systems should: (1) be central to policies rather than normalised as commodity markets; (2) enable sustainable livelihoods with value and respect; (3) promote localization by close proximity of suppliers and consumers, rejecting inappropriate food aid and avoiding dependence on unaccountable corporations; (4) place control in local food suppliers who collaborate with local food producers and reject privatization of natural resources; (5) incorporate traditional knowledge and reject technologies that undermine local food systems; and (6) maximize contributions of natural ecosystems and reject energy intensive, monocultural, industrialized and destructive practices (Gordillo and Jerónimo, 2013). These pillars prioritize production of domestic food ahead of trade needs, local people's food and land rights as well as guardianship of the environment (Clapp, 2015).

The effectiveness of food sovereignty as development policy remains unclear, although studies have shown positive early indications. Nyantakyi-Frimpong et al. (2017) have reviewed programmes in Malawi where alternative indigenous practices have been fostered using diverse farming and intercropping systems. Initial results show reduced dependencies on industrial inputs, improved food availability, dietary diversity and farming community collaboration. Pollination, water quality, weed suppression and pest control also showed signs of improvement. The researchers caveat that the results may also be achieved by the complementary concept of agroecology (ecological and regenerative agricultural practices) and more equitable trade policies without the full land governance demanded by food sovereignty.

FAO (2017b) cautions, however, that protectionism in food production should not be misinterpreted as food security. They example export restrictions designed to control local food prices applied by over 30 countries between 2007 and 2011, including 15 Asian countries. The combined effect between 2006 and 2008 was reportedly a 52 percent increase in rice prices and an 18 percent increase in wheat and maize prices. This negatively impacted food importing developing countries the most, especially in Africa. Considering the global interconnectedness of the current food system, food sovereignty measures taken in isolation of global impacts can negatively impact food security in dependent communities.

Clapp (2015) also adds that food sovereignty remains silent on both nutritional requirements and structural gender equality issues such as access to land, division of labour and domestic violence. Clapp recommends agroecological policies and corresponding indicators that allow for

a balanced mix between self-reliance and trade, especially considering uncertainty regarding whether yields on small-scale farms will be enough to satisfy growing urban demands.

Ascertaining a balanced mix between mainstream food security policies and those like the tenets of food sovereignty appears to be increasingly on the global radar. The Committee of World Food Security (CFS, 2019, p. 1) propose systemic transformations that significantly impact "what people eat, as well as how food is produced, processed, transported and sold". The State of Food Security and Nutrition (FAO, 2019a) calls for agricultural and food systems transformation that equalizes the balance between securing accessible quality food and trade requirements. FAO affirms that people and communities should sit at the centre of policies, mirroring language from food sovereignty literature. In their FAO paper, Gordillo and Jerónimo (2013, p. 10) set a vision for revolutionized agricultural systems that include "new institutions - new game rules - predicated on the knowledge economy, decentralization of operational decisions and emphasis on designing comprehensive territory-based policies with broad social consensus". The amount of political will required to implement such transformations at both national and global levels, however, will continue to be a challenge.

The concept of food sovereignty, the right of people to control their own food and agriculture systems, aligns to development frameworks that are driven by local participation and community empowerment (rather than with mainstream views limited to globalized economic development). It is then interesting to consider food sovereignty as a development framework applied to Gómez's (2018) framing of the HDN (that is, a focus on locals themselves realizing connectedness between humanitarian response and development goals). A natural conclusion would be that food security interventions should promote self-sufficiency and self-determination based on localized knowledge and decision making.

The following final section of this chapter summarizes four key factors uncovered from the literature that constrain achievement in the food security HDN.

## 2.6. Four factors that constrain food security HDN

Despite the strategic direction the aid sector has set, few tools have been developed to address HDN (Hanatani, Gómez & Kawaguchi, 2018). This section presents key issues that constrain further synergy between humanitarian interventions and longer-term food security. It reports

four factors that limit greater food security HDN convergence from the literature. These include: (1) global decline of agricultural expenditure including in disaster risk reduction; (2) delayed release of post-disaster development financing; (3) lack of appropriate skills, data and knowledge to uncover HDN opportunities; and (4) a slow transition to localized decision making and participation.

Firstly, agriculture, DRR and resilience should be a core food security policy (OECD, 2012; FAO 2019b), however progress is constrained by a long period of stagnant investment. Trujillo and Baas (2014) report that despite escalating climate change impacts, project funds have been used in ad hoc ways to support DRR activities and slim agricultural budgets have no specific DRR allocation. Agricultural aid expenditure decreased from 17 percent of foreign aid in the 1980s (WFP, 2006) to averaging 5 percent in the last decade (OECD, 2019b). This coincides with growing humanitarian assistance expenditure reflecting growing needs, which went from US$423 million in 2000 to US$4.2 billion in 2017 (OECD, 2019a). In Africa, the African Union's Comprehensive Africa Agricultural Development Programme (CAADP) targets closing agricultural funding gaps in national development plans through a commitment to allocate at least 10 percent of public expenditure to agriculture. However, by 2017 only 10 out of 55 countries had met this commitment and the lowest 30 contributions averaged just 4.7 percent (AU, 2018).

Humanitarian and development actors are beginning to understand that preparedness and early action activities exist in the HDN and require close partnership and coordination across aid agencies. Recent shifts to funding hopefully signal a changing tide of agricultural under-spending. The 2019 Global Humanitarian Assistance report reveals a 25 percent increase in DRR foreign aid spending from 2014 to 2017 (DEVINT, 2019). This is an overdue investment considering de-prioritization of sustainable and resilient agricultural systems in the previous two decades has left vulnerable countries highly exposed to climatic events.

A second constraining factor for HDN is the limited availability or flexibility of funds released early in the disaster response process. It is widely acknowledged that the scale of disaster recovery needs could be significantly decreased through improved agility in financing tools, including early action based on early warning tools (FSIN, 2019; Gómez, 2018; Audet, 2015). FAO (2010b) identified that these inflexible and siloed funding structures lack the ability to cater for root issues especially regarding livelihood strategies, often leading to exclusion of development perspectives from influencing early directions. For example, UN OCHA's Central

Emergency Response Funds is restricted by life-saving criteria which means funds cannot be used to create permanent structures. Numerous examples exist where funding is sought in high risk disaster areas year after year to support the same people with humanitarian needs as temporary shelters are destroyed by a repeat disaster (UNOCHA, 2020). FAO (2010b) also example the severe underfunding that constrained an agricultural recovery plan from achieving their goal of local production constituting 60 percent of national food consumption after the Haiti earthquake in 2010. Konandreas (2010) reports that even when local farmers are motivated to rapidly adapt to different agricultural systems or livelihood strategies after a disaster, there is little national or international funding, policy or political will to integrate agricultural resilience strategies.

A growing trend in humanitarian funding by development banks and the private sector is based on predetermined levels of disaster risk financing. This is predicted to increase the pace, understanding and visibility of disaster response with the potential to fulfil 20 - 30 percent of all future humanitarian needs (DEVINT, 2018). These tools, if carefully measured, could also support greater investment in releasing early financing supporting HDN collaboration.

A third constraint that hinders HDN productivity is the lack of timely development skills, knowledge and integrated data available to support post-disaster agricultural recovery and joint needs assessments. FAO (2017a) confirms that a lack of appropriate skills for loss assessment and quantification, and a short-term vision when conducting response and recovery planning can lead to risks being inadvertently maintained or rebuilt into recovery. They also report a lack of detailed assessment data on the full impact of a disaster on agriculture, including the value chain, all elements of food security, environment and sector and economy impacts (FAO, 2015b). Data disaggregation is also essential to improve understanding on how disasters affect different groups of people and sub-sectors; however, this level of data is not systematically collected nationally or locally. FAO (2017a) appeal for funding to track and analyse complete disaster impact on agriculture and food systems, enabling better informed strategies.

There are many situations where aid providers have not effectively integrated local development information into program design. The presence of adequate development skills, knowledge and data would enable a true reflection of diverse and complex livelihoods that existed pre-disaster (Christoplos, 2006; Konyndyk, 2018). Further to this, opportunities to integrate gender equality programming or community-led development initiatives could be more

easily detected (Frayne, Moser and Ziervogel, 2012). Early collaboration supported by adequate data and development knowledge could see a departure from siloed mandates and highlight an aggregate view of needs, strengths and opportunities across the response system.

A fourth HDN restriction is the enduring distance between humanitarian responders and disaster affected people. Christopolos (2006) emphasizes responders do not hold enough regard to the pre-disaster local development patterns which will persist long after interventions cease. Responders are being accused of being fundamentally unprepared to shift to models that allow local people to lead recovery (Scoones & Thompson, 2011). Although the proportion of humanitarian assistance funnelled to local or national NGOs (or one intermediary) slightly increased from 2.3 percent in 2016 to 3.6 percent in 2017, this falls dramatically short of the 25 percent targeted in the Grand Bargain (DEVINT, 2019).

Although some aid agencies have improved awareness around linking between disaster response phases, it can often be a 'tunnel-vision' perspective covering their own portfolio rather the wider development context of local communities (Gómez, 2018). Shamsie (2012) found that weakened national capacity following the Haiti earthquake led to greater influence of donors and saw the re-establishment of export-led development strategies by investing in value chains and importing food. She acknowledges a missed opportunity to engage with local people to understand whether changes to these strategies were appropriate or how power imbalances could be shifted. Another example is the adoption of resilient indigenous agricultural methods, where development voices could share the benefits of local, nutritious and diverse food systems and rebuilding of local resources that can adapt to climate impacts (UNISDR, 2019).

To address such issues, the Committee for Food Security (CFS, 2019) encourage aid agencies to invest in participatory innovation governance as well as joint development and communication of knowledge with local organizations. This would be a good start; however, it is more likely that a fundamental shift in the allocation of funds to local communities can prompt the fruition of such models. This clarity will come when a clear vision regarding the definition of 'development' is adopted in the context of HDN, as the true owners of development is and always will be, the local people.

## 2.7. Summary

This chapter introduced key elements of food security. A core function of agricultural development should be to secure sustainable food availability, hence is a core part of food security. Whether this is through local consumption or enabling purchases of imported food through international trade varies depending on the development approach adopted. The African Green Movement is an example of contemporary mainstream agricultural development promoting intensified production supported by technology. The chapter also delved into key food security humanitarian interventions commonly utilised in disaster response, with a focussed discussion on food aid, cash grants and seed aid.

The chapter progressed with a presentation of the HDN in natural disaster response, where 'Build Back Better' philosophy aims to promote aligning humanitarian action with development outcomes as well as enhancing resilience to future disasters. HDN adoption can further advocate for the inclusion of local people in response decision-making to achieve their development goals. This was related to control of food systems by local people in the area of food security, something strongly advocated for by proponents of food sovereignty development movements.

Finally, key constraints that inhibit greater HDN alignment for food security were summarized. Development perspectives can be excluded from influencing decision making especially in disaster response due to global decline in agricultural expenditure, as well as delayed release of post-disaster development financing. Lack of relevant skills and integrated analysis to uncover local development contexts also inhibits informed humanitarian interventions that can also contribute to development outcomes. Finally, disaster response decision making remains centralized within aid agencies with insufficient local participation, limiting local empowerment and leaving disaster-affected communities at the mercy of shifting aid worker priorities and schedules.

The following chapter introduces Mozambique as the basis of this study's case example, and briefly describes its development and food security context.

# 3. Chapter Three: Mozambique and Cyclones Idai and Kenneth

## 3.1. Introduction

This chapter and the next two aim at exemplifying the literature review on the food security HDN and its main constraints in humanitarian response to disasters by using a case study. Specifically, those three chapters describe the food security HDN in Mozambique in response to Cyclones Idai and Kenneth, which hit the country in March 2019. The current chapter gives a few checkpoints on Mozambique, especially regarding its level of development and its food security pre-cyclones. It then describes the Cyclones' global impact on the country. The Cyclones' effect on food security and the food security response are described in Chapter Five.

## 3.2. Mozambique's development context

Mozambique forms part of southeast Africa, stretching out along the Indian Ocean coastline. It is rich in arable land, forestry, water, energy and mineral resources including coal, gas, titanium and graphite (GoM, 2015). Under Portuguese colonial rule between 1884 to 1975, the people of Mozambique suffered through forced labour, under-development and unfair agricultural trading (Shilomboleni, 2018). Guerrilla warfare against the colonizers saw the Front for the Liberation of Mozambique (FRELIMO) movement take governance power through independence in 1975. The white minority-led governments of then Rhodesia (now Zimbabwe) and South Africa responded in the following years with a destabilization war, arming the Renamo guerrilla group, promoting civil war and violence against government rule. The war continued until 1992, costing $US 20 billion, taking one million lives and displacing five million more (Hanlon, 2010).

The adoption of a market-oriented policy by Mozambique in the 1980s led to an increase of donors and non-government organizations involved in food and import aid programmes. Mozambique's accounting, financial control systems, and management of public expenditures, however, still needed a significant improvement. Failure to manage these improvements only further increased the country's dependence, leading to Mozambique's ranking as one of the poorest and most aid-dependent country's in the world (UN, 2010).

The global outcry at escalating poverty in the 2000s saw a new focus on development aid and poverty reduction manifested in the Millennium Development Goals (MDGs). The turn of the

century saw a sudden influx of international NGOs working on projects such as rural infrastructure, seed-provisioning, water posts, land title registrations, capacity building and facilitating associations for marketing, savings and credit (Sabaratnam, 2017). The success of these initiatives was dependent on the prices that smallholder farmers could get, however prices remained significantly unpredictable. Sabaratnam (2017, p. 95) described that "peasants have borne the costs of having either unsold or unsellable crops, diseased or infested crops, monopolistic and unfair purchase arrangements, lack of transport, storage and the other stresses of uncertainty".

Mozambique is now ranked the ninth lowest in the global humanitarian development index with 46.1 percent of their 28 million people living below the national poverty line (World Bank, 2014). Mozambicans have an average life expectancy of 59 years, high infant and maternal mortality rates and a male illiteracy rate of 27% that contrasts with 39% for females (GoM, 2019). Approximately 68 percent of people live in rural areas and 60 percent live along the coastlines, reflecting livelihoods that are dependent on natural resources including fishing and rain-fed agriculture (UNDP, 2019). While the World Bank (2014) cited an annual average GDP growth of 7.6 per cent for the period 1993–2010, growth has typically benefitted those already with resources, and has not been translated into meaningful development outcomes for many Mozambicans.

Living in the third most exposed country to climate-related hazards in Africa, the people of Mozambique are no strangers to natural disasters. On average, the central and southern regions suffer seven droughts every ten years and are exposed to floods every two to three years (IASC, 2019). The impacts of climate change are projected to see increasing unpredictability and variability with more intense droughts, floods and uncontrolled fires. The following section will focus on food security and agriculture in Mozambique before Cyclones Idai and Kenneth hit Mozambique.

### 3.3. Pre-Cyclones food security in Mozambique

Most agriculture in Mozambique is practised by smallholder farmers. Subsistence production is mostly rain-fed with rather poor integration into markets (IIED, 2015). Peasants commonly practice labour-intensive subsistence farming with low yields and little market interaction, utilizing very little technology, fertilizer, extension services, animal traction, irrigation or

improved seeds (CARE, 2014). Access and quality of agricultural extension services and climate information are identified as key inhibitors to increased productivity. Other main constraints on smallholders' productivity include poor transport facilities, lack of storage facilities, great post-harvest losses, great transaction costs, low coverage of extension services, and difficult access to financial services (IIED, 2015). As a result, farmers can only produce enough food to feed their households, rather than sell it to markets, for less than eight months of the year (SETSAN, 2013).

The high incidence of poverty along with low socioeconomic development has compromised improvements in agricultural productivity. Although agriculture is the main source of income for much of the population (70 percent), its contribution to Mozambique's GDP is only 23 percent. The IIED evaluates that yields remain between 30 and 60 percent of their potential, which impacts agricultural growth (IIED, 2015). As a result, food security and the income of the vast majority of Mozambique's workforce are seriously compromised. Despite recent spikes in agricultural sector growth, land and labour productivity continues to stagnate, with limited access to technology and credit services. The IIED predicts that land expansion driven growth will be unsustainable over time.

Like the African Green Movement discussed in Chapter 2, in 2007, the Government adopted a green revolution strategic approach to agricultural development, which was formalized as in May 2011 as the Plan for Agricultural Development (PEDSA) (GoM, 2010). It promised to shift away from chronic agricultural under-investment in smallholder farms, whilst continuing to invest in mainstream value chains for specific crops (CARE, 2014). PEDSA focussed on transfer of technologies and provisioning of agricultural inputs, agricultural production, processing and marketing, and sustainable natural resource management.

Although large-scale investments in agriculture were slowly increasing based on local demand and global demand for industrial inputs and biofuels, the results from PEDSA showed mostly disappointing outcomes against targets. A 2017 review of the National Agricultural Investment Plan (PNISA), the operationalization of PEDSA, revealed a: 3.5 percent shortfall in targeted agricultural growth rate; 4 percent shortfall in targeted agricultural public expenditure; no significant developments in nutrition, poverty, private sector investment, or crop yields in food crops such as cereals and beans (Sabaratnam, 2017). Agricultural varieties did increase, however, farmer adoption rates only reached 10 percent of the 100 percent target rate.

Similarly, irrigation expansions only reached 20,000 ha into the 50,000-ha target. Some early stage positive trends were seen in some minor crops such as tomato, Irish potato and sugarcane and aquaculture expansion, as well as some improved access due to expanded smallholder land ownership and expanded rural roads. The need to significantly improve coordination was highlighted as a work programme to improve and disseminate sustainable agriculture (IIED, 2015). There has also been relatively significant investment in transport infrastructure, including the rehabilitation of railways, roads and facilities at Beira port – all to support agricultural development (Future Agriculture, 2019). The plan was criticised, however, for not focussing on diversity of socio-economic conditions of smallholder farmers (Leonardo, van de Ven, Kanellopoulos & Giller, 2018). In addition, while the policy components related to growth and productivity received much support, those related to sustainability lacked institutional advocacy.

Most smallholder farmers continue to experience high incidence of poverty and low incomes, with food access particularly restricted during the lean agricultural period between January and March. Almost 35 percent of families live in chronic food insecurity and they experience high levels of hunger: 43 percent of children under five are affected by stunting; 20 percent suffer from severe chronic malnutrition; and 8 percent from wasting (CARE, 2014, p. 6). IIED (2015) shows that there are significantly more chronic and acute food insecure households in rural areas. Those in urban areas benefit from higher incomes, health services and markets which enable richer and more diversified diets. The IIED data related to malnutrition also shows a profound inequality between rural and urban areas, where the prevalence of chronic malnutrition in children under 5 is about 50 per cent vs. 36 per cent, respectively.

### 3.4. Cyclones Idai & Kenneth

Tropical Cyclone Idai landed with a large storm surge in southern Mozambique near Beira City on 14 March 2019. UNDP (2019) report that floodwaters rose above 10 metres, resulting from more than 200 mm of sustained heavy rain over a 24-hour period, decimated entire villages under water across Sofala, Manica, Zambezia, Tete and Inhambane provinces. Over 715,000 hectares of cultivated crops were flooded, along with severe loss of livestock (IASC, 2019). After a system-wide scale up, the number of organisations responding went from 20 to more than 200 after one month into the response. At this time, 160,000 out of the total 400,000

people displaced were staying in 164 temporary shelters. 1600 people were injured, and more than 600 lives were lost.

Six weeks after Cyclone Idai's devastation, Tropical Cyclone Kenneth also made landfall in Mozambique. Kenneth was the strongest cyclone on record to hit the African continent, and hit the Northern Province of Cabo Delgado, an area with ongoing low-level violent conflict. Losses of over 55,000 hectares of crops were estimated. Figure 3 shows the flight path of both cyclones.

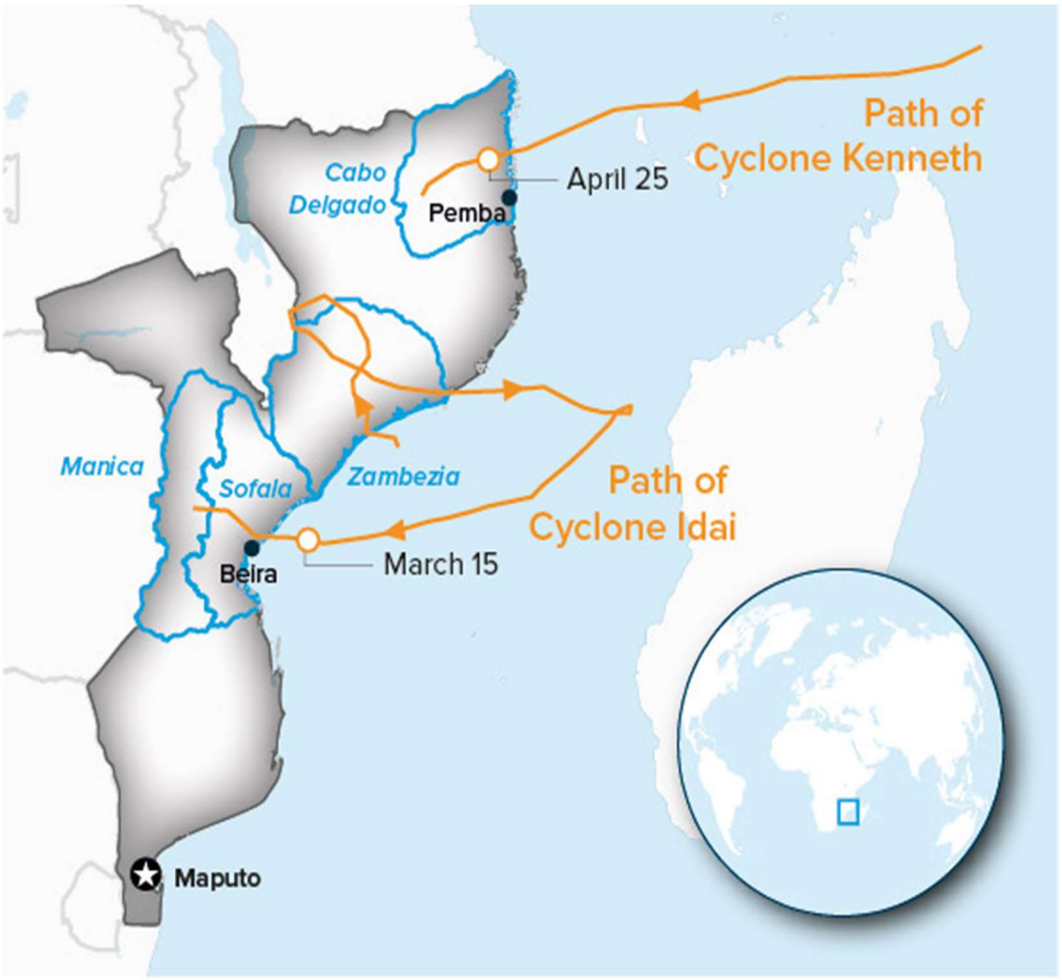


*Figure 3: Cyclone Idai and Cyclone Kenneth paths (GoM, 2019)*

Early-warning systems were put in place before the Cyclones made landfall. Relief supplies were mobilised before Idai hit due to forecast-based financing mechanisms. Many that were believed to be most susceptible to flooding were evacuated. Yet the Cyclones' impact had been underestimated, with more than 50,000 people waiting to be rescued one week after the

disaster, being for instance stranded on trees and rooftops. The strength of the storm resulted in most routes being unusable. Shelters also were destroyed. Even trained local professionals were rapidly pushed beyond their capacity (Munichre-foundation, 2019).

GoM (2019) estimates Mozambique's post-disaster response needs to be approximately $3.2 billion (USD). Figure 4 represents the distribution of expected needs per sector. The cost to recover housing was expected to be nearly $700 million USD. Even three months after the Cyclones hit, more than half a million people in over 100,000 households were still living in destroyed or structurally damaged homes, sheltered in resettlement sites or remained displaced in emergency accommodation (IOM, 2019). Many of these locations were deemed unsafe, inadequately prepared, and lacking access to fundamental basic goods and services. The impact of the Cyclones on transportation was also immense. The growth of the services sector (mostly transport, communications, trade and tourism) was expected to slow from 2.4% in 2018 to 1.7% in 2019 (GoM, 2019) due to heavy infrastructural damage. It was foreseen that this could deteriorate further with the rainy season expected to start in October, if relief operations were not kept at the necessary levels. As shown in Figure 4, post-recovery needs regarding food security were also very high. (Further description of the impact of the Cyclones on food security and the food security response are elaborated in Chapter Five).

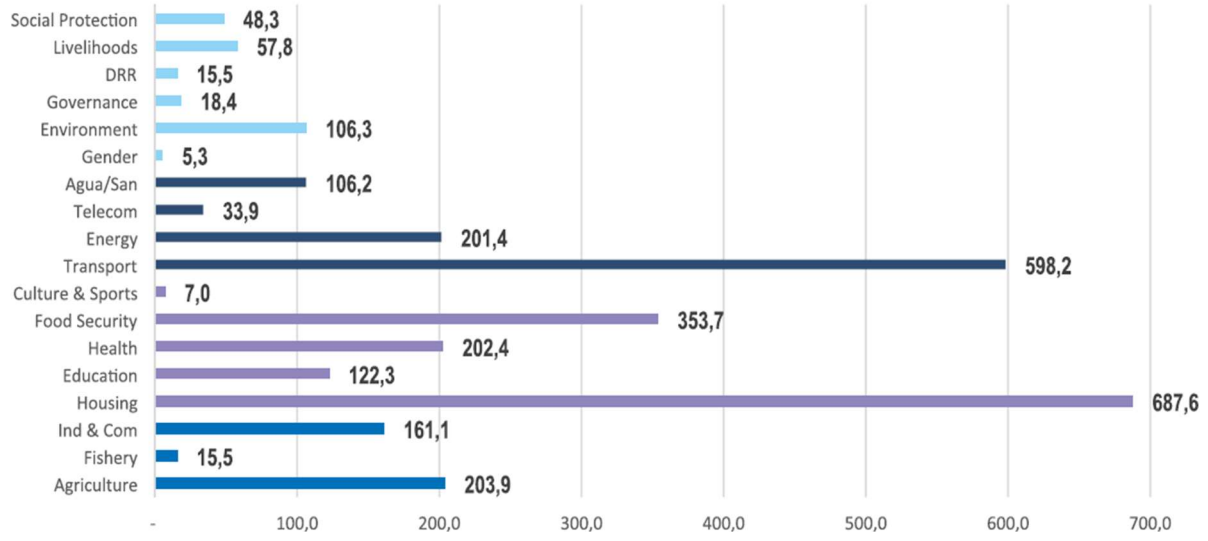


*Figure 4. Post Disaster Recovery Needs (GoM, 2019)*

The Cyclones also had dramatic political effects as important events were expected when they hit Mozambique. Those events were: a reconciliation process between the Government and

Renamo, the process of Demobilization, Disarmament and Reintegration (DDR), the general elections in October 2019, and the new decentralization package of agreements (GoM, 2019).

## 3.5. Summary

This chapter has briefly introduced the context of the case study on Cyclones Idai and Kenneth in Mozambique. The Cyclones battered the country whilst it was already in a difficult food security situation. The next chapter outlines the case study methodology, methods and analysis approach used to investigate aid providers' perceptions of the food security HDN in disaster response.

# 4. Chapter Four: Methodology to investigate the food security HDN in response to the Cyclones

## 4.1. Introduction

This research aims to explore constraints in realising the food security HDN in disaster response. It uses the experiences of responders to Cyclones Idai and Kenneth, which hit Mozambique in March 2019. A qualitative research methodology was applied, based upon inductive and subjective reasoning, which was supported by semi-structured interviews. Representatives of some key organizations involved in the disaster relief were asked to describe the food security response and reflect on key nexus issues. This chapter outlines the main components of this approach, reflections on ethical concerns, how the data was collected, modes of analysis and main research limitations.

## 4.2. A qualitative methodology

Qualitative research challenges historical presumptions that knowledge is purely the outcome of logical quantitative deduction. O'Leary (2017, p. 130) describes that qualitative studies evidence "the value of depth over quantity and works at delving into social complexities in order to truly explore and understand the interactions, processes, lived experiences, and belief systems that are a part of individuals, institutions, cultural groups and even the everyday". This study is framed by O'Leary's understanding of knowledge and aims to enlighten from different perspectives what the humanitarian-development nexus means in disaster response in the area of food security.

## 4.3. Ethical considerations

This research was a primarily desk-based project conducted under the governance of Massey University's School of People, Environment and Planning. The department's in-house ethics review process enabled the researcher to draft and discuss relevant ethical considerations with two senior staff members. The key considerations included: use of experts; informed consent; respectful conduct; and language.

Interviews with experts were used to add local context to the literature review and provide new insights based on privileged access to information. The snowballing method was most suited to this approach; however, it was important that this was done in a way that does not put pressure on prospective participants to contribute. It was decided that directly approaching experts that were directly involved in the Mozambique response through contact details publicly available online (FAO, 2019g) would be the best approach. This minimized the likelihood of participants feeling obligated to participate through senior management or peer referrals.

It was also important to obtain informed and voluntary consent from all interviewees. Participants should be clear before interviews commence on how the information they share will be used and for what purpose. An information sheet was distributed by email before all interviews, which outlined the research objectives, example interview questions, time commitment, overview of risks, rights of the participant, their permission to record the interview, their access to the data and their ability to withdraw from the research. All participants were informed that research data, including documents, interview recordings and notes, were to be stored in a password-protected, private hard-drive in order to protect the data collected. Participants were also asked if they gave consent for the interviews to be recorded through the online tool (Skype). Consent also extended to considering how participants wanted to be referred to in the study, and participants were given the option of anonymity or able to self-select their description.

Research should also strive to treat participants time with respect, integrity, social and cultural sensitivity, and foster mutually beneficial perspectives. Special attention and preparation prior to the online interviews meant that the performance and quality of connections were tested so as to not cause unnecessary inconvenience. Participants in this research were unlikely to experience potential harm or be in a vulnerable position considering they were experienced in humanitarian response and in a relatively high position of power. The researcher committed to informing all participants of the key results of the research, allowing for some reciprocity in exchange for the time and information volunteered.

The language that the interview was to be conducted would be in English. However, it was discussed that should a local food security organisation in Mozambique agree to participate, the option to have a Portuguese translator available to facilitate the interview would be left open. Unfortunately, the researcher was not able to secure an interview with a local organisation.

The key ethical considerations were summarized and submitted to Massey University's Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants (MUHEC) process. It was evaluated by peer review and judged to be low risk, and therefore a full ethics application was not required (Ethics notification number 4000021938).

## 4.4. Data Collection

### 4.4.1. Participants

To achieve credibility in qualitative research, O'Leary (2017) suggests a strategy of crystallization, where different perspectives on a single situation allow an in-depth multi-faceted representation of knowledge. This research aimed at recruiting a broad panel of informants from organizations involved in food security disaster response. This included: United Nations agencies, such as World Food Programme (WFP) and Food and Agriculture Organization (FAO); international non-governmental organizations; local NGOs; development agencies and financial donors.

The objective was to identify and gain access to respondents who were open, representative, honest, knowledgeable, could make the time in their schedule and who had adequate recollection of the response. These constraints framed the challenge to recruit participants. The targeted participants were identified as individuals who participated in the Cyclones' Food Security response cluster. A list of potential participants was easily available online with contact details from the Food Security cluster website (FAO, 2019g).

The researcher presented herself via email as a Master of International Development student from Massey University, New Zealand to the list of Food Security cluster participants contact list. The purpose of the research was mentioned, and the case study and the structure of the interview (approximately one-hour semi-structured online interview related to food security responses to the Cyclones) were described. Finally, it was presented that should the potential participants register their interest, further information would be provided, and appropriate times discussed.

A panel of seven recruited participants from a broad range of organisations was confirmed. This included one local employee of WFP Mozambique; one international manager at WFP Mozambique; three representatives from International NGOs (INGOs); one international development advisor contracted to a local NGO; and one commercial agricultural specialist contracted to provide training and support to farmers. Disappointingly, after four attempts at scheduling (and rescheduling) online interviews and organising the support of an official Portuguese translator, the researcher was not successful in establishing communication with an interested representative of a local Mozambican NGOs. Nor was a successful response received for an interview with any representatives from FAO or financial donors. Apart from these setbacks, all the remaining interviews were conducted in English online using the Skype conferencing tool and did not experience any major or minor difficulties.

**Participants and their self-selected descriptors (names removed):**

| | *Participant role:* | *Referred to in this study as:* |
|---|---|---|
| 1 | Local Vulnerability Assessment and Food Security Analyst, WFP Mozambique (UN body) | Local WFP participant |
| 2 | Deputy Country Director, WFP Mozambique | WFP participant |
| 3 | Food Security Expert working in WeltHungerHilfe (a German International NGO) | German INGO participant |
| 4 | Team member, Concern Worldwide (an Irish International NGO) | Irish INGO participant |
| 5 | Team member, Concern Worldwide | Irish INGO participant |
| 6 | Development Advisor hired by a local NGO | Local NGO advisor |
| 7 | Advisor, Food Security Systems | Agricultural Specialist |

### 4.4.2. Open-ended semi-structured interviews

Semi-structured interviews were used to research participants' perspective on Food Security response to the Cyclones. Semi-structured interviews enable flexible conversations to take place, which provide "rich and detailed data about individual experiences and perspectives" (Clarke and Braun, 2013, p.80). This was a useful tool that enabled the researcher to navigate through the varying topics covered in this research subject area.

Each interview occurred online during one video-conference call session using Skype software. The interviews began with a presentation of the researcher and the purpose of the research. To be fully present in the conversation, and not be distracted by taking notes, it was agreed with participants that the audio interviews would be recorded. The expected length was stated, and a reminder that the participant could withdraw from the research at any time. Although interviews followed the same general structure, all participants had different backgrounds and therefore questions were tailored to specific participants. An example list of key questions for a single interview is in the Annex.

All interviewees began by sharing his/her position, range of experience and general role in the disaster response. They then were asked to share their experience of immediate food security response, including damage, impact of the Cyclones, specific interventions, and outcomes. While the topic of this research is focussed on the HDN, rather than purely on humanitarian responses, such questions on the immediate response allowed the researcher to set the context and develop an initial connected discussion with the interviewees. The core interview questions touched on a variety of topics that were presented in the literature review (Chapter Two), with a goal to tease out the type of interventions and perceived outcomes and flaws. This included, amongst other things, agricultural expenditure, disaster preparedness, post-disaster development financing, effort and skill required to respond in the local context, and local participation. Lastly, interviewees were asked to make any final comments, and with final concluding remarks interviews were closed. The average time for an interview was approximately 60 minutes, which is considered by Clarke and Braun (2013) to be a suitable length of time for a qualitative research study.

### 4.4.3. Publicly available documents

The Mozambique Food Security cluster published many publicly available documents. These included meeting minutes, contact lists, and regional maps with allocated NGOs against identified needs. The semi-structured interviews were supported by a review of the Cyclones' food security response documents found online and also some provided by the agencies interviewed. The analysis of supporting documents allowed the researcher to understand facts regarding the response through the documents and left time to focus on perceptions of the participants in the interview (Horton, Macve, & Struyen, 2004).

## 4.5. Data analysis

The analysis of the semi-structured interviews followed three main consecutive steps: (1) After summary notes were written for each interview, the key topics covered in the interviews were identified; (2) the topics were reviewed to look for common themes across the interviews, and reflections were made on the perspectives on the participants. It was postulated that participants' answers grossly represented the perspectives of the organizations they worked for and role claimed in the emergency response period; (3) The different perspectives were organised in a cohesive manner, integrated with supporting findings from the document analysis and summarised as narratives in the Results chapter.

The analysis of interview notes was conducted in line with some of the recommendations explained in detail by Burnard (1991). Particular attention was focussed on (1) to use "the process of immersion to attempt to become more aware of the 'life world' of the respondent"; (2) to "write down headings to describe all aspects of the content"; and (3) to "reduce the number of categories by 'collapsing' some of the ones that are similar into broader categories" (Burnard, 1991, p.462). The outcome of this coding method was a sequential picture of emergency response activities and the emergence of key constraints to food security HDN, as presented in Chapter Five.

## 4.6. Reflections on limitations

Considering the small scale of this research report, there were many limitations that framed the boundaries of any knowledge uncovered. Firstly, a key drawback of this research is the omission of the important voices of the survivors and communities in Mozambique recovering from the impacts of the Cyclones. The HDN, which this research is exploring, is a western and top-down mainstream view of development. Ideally the voices of survivors would be a core component of an academic understanding of the HDN. Secondly, the researcher was unable to secure participation from three key organisational groups, namely local NGOS, the UN Food and Agriculture Organization (FAO) and financial donors. Thirdly, data analysis was not blind to data gathering. The nature of qualitative research reflects inter-relationships and interpretations between the researcher and interviewees, and the analysis process is also informed by the preceding social and verbal interactions. This may influence the consistency and comparability between different interview results. Fourthly, the researcher's relationship as

a previous intern at the United Nations could have interfered with quality of data gathering and interpretation of results due to pre-existing biased understanding of the response period. Fifth, another key limitation lies in the research timeframe. Humanitarian interventions are likely to extend up to two or three years after the disaster in Mozambique, and development interventions will continue indefinitely. Insights on the Food Security HDN are likely to become more meaningful with a longer-term reflection rather than less than one year after the disaster. On this note, it could be interesting to compare the results of the study with that of others that would measure the perception of food security response actors over time after the disaster.

Finally, specific caution was taken regarding both under-reporting and over-reporting in key interest areas explored in the interviews (Jewkes et al., 2000). Both under- or over-reporting can be due to inappropriate wording of questions, closed-ended questions, or inattention. Under-reporting was minimized by establishing and maintaining trust with interview participants, by encouraging participants to open as much as they could and by ensuring confidentiality. Over-reporting was minimized by keeping the participants focussed on facts rather than emotional responses and facilitating the interview questions effectively when faced with repetitive responses.

## 4.7. Summary

In this chapter, the methodology and nature of the research was presented, and the application of qualitative semi-structured interviews described. Key research limitations were also raised. Despite these limitations however, the research results have uncovered some elements of how the humanitarian response to the Cyclones in Mozambique considers the food security HDN and where the nexus could be further leveraged.

# 5. Chapter Five: Analysis of the food security HDN in response to the Cyclones

## 5.1. Introduction

The Cyclones will be remembered for decades to come by the people inhabiting the Central region of Mozambique. The local WFP participant reported that most locals could not remember another time where waters ran this high, where forgotten pests had reappeared after decades of absence, and where some mothers still are looking for their lost children in the pastures. This chapter describes the impact of the Cyclones on food security, and the international food security response to the Cyclones based on response documents and interviews with responders. It includes key considerations in the immediate response and transition to recovery. Finally, it summarizes the main food security HDN constraints emerging from the case study.

## 5.2. Agricultural damage

Early warning systems were triggered by local authorities in anticipation of the Cyclones. Three participants noted that although these processes were followed, the reaction was not at a significant scale, as no one had predicted the immense force that accompanied the Cyclones. The Cyclones and extreme rainfall resulted in immediate and severe food insecurity, especially for households affected by losses of food crops and livestock, with over 500,000 ha of crops destroyed (FAO, 2019e). The German INGO participant reflected on the severe disappointment of the farmers who had predicted a fruitful agricultural season, which was merely two weeks away from harvest when the first cyclone made landfall. The losses caused a reduction in food supplies from local production in the Central region and reduced income opportunities from crop sales. According to FAO/GIEWS (2019), the Integrated Phase Classification (IPC) food security analysis found around 1.6 million people were assessed to be severely food insecure during the period between June and September 2019, nearly double the level of the previous year. They expected the food insecure caseload to increase further to 1.9 million people during the lean season between October 2019 and February 2020.

Maize crops accounted for the bulk of losses. FAO/GIEWS (2019) reports show a reduction in 2019 by 0.4 million tonnes to an estimated 2.1 million tonnes. Paddy production also declined

to a below-average level of 350,000 tonnes. Outputs of sorghum and millet, however, were estimated to be above average, as both crops are normally planted in higher altitudes that are less affected by floods (FAO/GIEWS, 2019). A lower cereal output resulted in an increase in the national import requirements for maize and rice in the 2019/20 year (April/March). National stocks, built up in 2017 and 2018 following two productive seasons, were expected to be drawn down in order to compensate for the production decline in 2019 and to limit import needs.

Overall, the growth in agriculture was expected to fall from 3.5 percent in 2018 to 2.0 percent in 2019 (FAO/GIEWS, 2019). This projected growth was predicted to occur from increased productivity in other regions of the country and the expected positive effects of the second agricultural season of 2018/2019.

### 5.3. Initial response

The Cyclones resulted in an immense disaster and immediately compromised food security. All seven participants outlined the impacts, including damage to crops, stocks, livestock, fishery, but also to personal tools and basic transportation facilities. The German and Irish INGO participants pointed out that medical conditions such as cholera, malaria, malnutrition (pellagra) and diarrhoea were rising, critical markets were affected, and prices inflated.

Mozambique's Technical Secretariat for Food Security and Nutrition agency (SETSAN) conducted Food Security and Nutrition Assessments in March and April 2019. Other assessments were reportedly conducted by IFRC, WFP and Concern International, the results of which were shared amongst agencies in the Food Security Cluster. Food security assessments showed significant reductions in quantities consumed in a meal: "*People were going to sleep hungry three or four days a week, and some were consuming rotten maize that was damaged by the flooding*" (German INGO participant). In some cases, beans and other legumes were sometimes not consumed due to local tastes. Some children were taken away from school as a coping strategy for saving money, all key signs of the level of food stress on the community.

The Government of Mozambique (GoM), through the Institute of National Crisis Management (INGC) and in alignment with their existing relationships with UN agencies and INGOs, led the humanitarian effort in response to the Cyclones. The UN Humanitarian Team deployed the

international cluster system, with national coordination in Maputo and regional coordination in Beira City.

Receiving early release of funding from international donors was not raised as an issue by any participant, which reflects the global visibility of the large-scale devastation the Cyclones caused. The strength and impact of the Cyclones and the catastrophic flooding led to immediate logistical and access challenges, a message that was shared by all seven responders. The immediate lack of food and the destruction of livelihoods were among the most important concerns of displaced rural people, preventing them from returning to their homes. Food assistance was the primary response provided by the World Food Programme (WFP) and supported by many government and international agencies. The main rationale was to ensure the food and nutrition of households were met through monthly food transfers, using cash, vouchers (maize, beans, seeds and tools), or in-kind food transfers (WFP participant).

Both WFP participants described that the rapid response teams sprang into action with heavy logistical support and cooperated with search and rescue teams for immediate distribution of nutritional in-kind food aid. WFP and the government retained general control of geographic targeting for aid distributions. Remote areas were difficult to access due to lack of infrastructure, flooding and water damage. Helicopters, boats and trucks were provisioned to support the delivery of food and supplies, and there was a strong focus on efficient food distribution. The initial stages used satellite imagery to show the extent of the flooding and then mapped on communities, and after a few weeks this translated into extensive maps. During this period there were still some hidden communities, an estimate of 110 families, that did not receive any aid (WFP participant). Through gradual refinement of outdated maps with up to date information, greater visibility was developed of all impacted communities.

Overall, as far as the initial response is concerned, all participants were impressed by the sheer machinery and scale of the humanitarian response, especially considering the significant access constraints. The local WFP participant asserted that they "*did everything we could*", and the Irish NGO participant described that "food security wise, the cluster was on top of the game". The initial response activities of the food security cluster saved and supported many lives. The WFP participant described admirably that their operations reached "*1 million people in four weeks and extended out to 1.8 million people in the first seven weeks, which includes the additional impact of Kenneth*". This was supported up by a Real Time Evaluation report on the

Mozambique response shared by the IFRC (2019, p. 1), which recounted that "highly effective early deployment decisions" were made, "supported by efficient donor management, early 'preventive audit' and successful resource mobilization". In addition, the report mentioned "unprecedented level of external coordination and cooperation".

### 5.4. Recovery response

The evolution from life-saving response activities to recovery saw food security cluster agencies collaborating on various food security interventions. The scale of the emergency meant this transition was very gradual, especially from a food security perspective considering that only after the main agricultural season was harvested could locals begin consuming local food again (all participants).

WFP's recovery plans began around August 2019, primarily through Food Assistance for Assets (FAA) activities (or, as described by Maxwell et al. (2008) in Table 1, Food for Work (FFW)). At the same time, the most vulnerable groups, including internally displaced people in the north, kept benefitting from unconditional food assistance. The core goals of the intervention were to support the creation and recovery of community assets until the next harvest season in March 2020, while still meeting the immediate food needs of targeted populations (by delivering value vouchers, commodity vouchers and in-kind assistance) (WFP, 2019). Such interventions aimed to enable rehabilitation of affected communities while contributing to strengthen future resilience to disasters.

For FAO (2019e), with the April planting season passing and an increasingly narrow window of opportunity available for planting for the October harvest, safeguarding the main agricultural season was essential. As shown in Figure 6, the mix of in-kind food and farming support varied depending on the needs of the local communities.

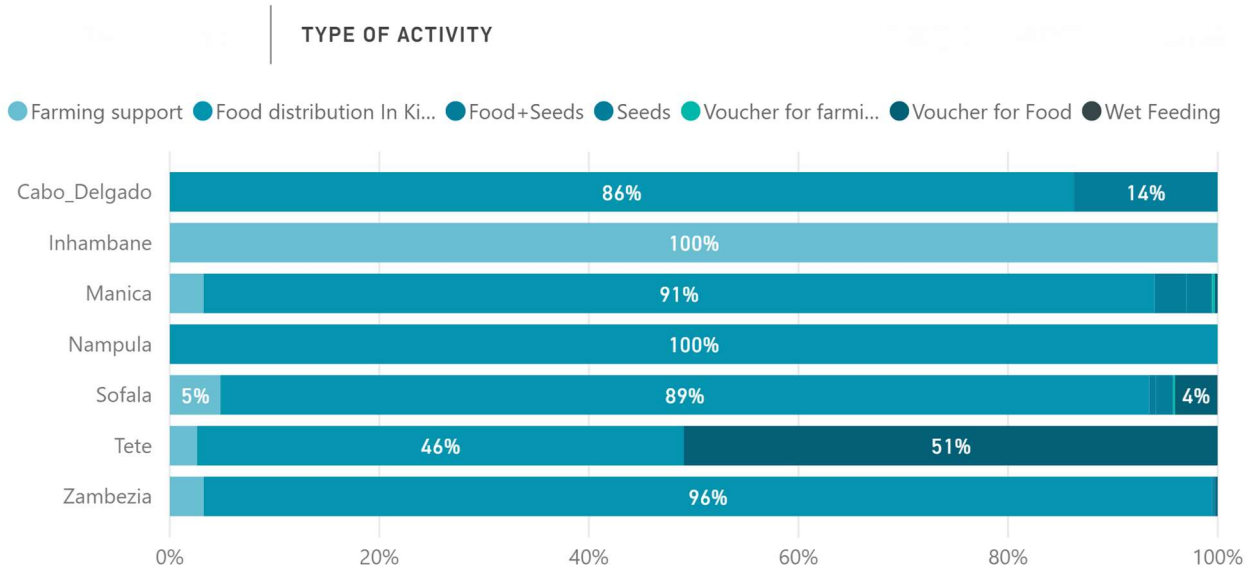


*Figure 6. Food security activity by region after the Cyclones hit Mozambique (UNOCHA, 2019)*

FAO also collaborated with WFP in FFA programs, training on combating Fall Armyworm infestation, clearing crop fields, rehabilitating soil and irrigation canals, repairing infrastructure and facilities such as roads and irrigation equipment, increasing fodder production and restoring or replacing fishing equipment. To improve the resilience of affected people, including to future disasters, the FAO offered their targeted expertise. They also provided seeds and livestock to respond to immediate food and nutrition needs and to ensure the second harvest was not missed (FAO, 2019f). They implemented an e-voucher programme for farmers, with 76,500 households having received support from July for the winter season. Vouchers were to be exchanged for seeds and tools, boosting markets and building back towards sustainable recovery. They also helped more than 150,000 households with vegetable seeds and tools to benefit from rebuilding small-scale agriculture and fisheries equipment between October and March (main agricultural season).

Notably, the Irish NGO described their activities and plans for sustainable agricultural supports "*We have already started with sustainable agricultural practices, intercropping, trainings, diversification, organic farming… not using chemicals. These have been designed with local agricultural ministries. This was important to start now, because people will have to adapt and cope in a better way.*" They also felt, however, that they felt the key motivation of the famers was to return back to normal: "*People wanted to do what they were doing in the past. Not have radical change... This is a time where people are grappling, so new things might be*

*resented, this decision was made in consultation. Let's get people back to normal, then we can think about something else."*

According to the IFRC (2019), 99,000 households received agricultural kits comprising seeds, tools and vegetable kits for the short winter harvest; 148,000 kg of maize, 78,000 kg of beans, and assorted vegetables were distributed in total. The seeds were used to grow early maturing crops that were ready to harvest 90 days after planting, addressing short-term food security nutrition and livelihood support. An effort was also made to save any remaining livestock by evacuating survivor animals, 300,000 livestock to receive vaccinations and veterinary support, benefitting 40,000 households.

A critical requirement of recovery activity was for agencies and the government to improve and share visibility of affected areas and beneficiaries. Teams led by the WFP and INGC undertook an extraordinary data collection exercise in October 2019 and produced a 158,427 $km^2$ Atlas for Natural Disaster Preparedness and Response (WFP, 2019). "*We would register everyone on behalf of the humanitarian community which would be used by all the other agencies - the biggest caseload is the food recipients which really covered everyone affected - the universe really"* (WFP participant). This data and analysis was shared across all agencies in the Cyclones Food Security cluster, and was also used by government agencies.

Other food security interventions mentioned in the literature that looked forward to recovery included training support for vegetable and hay production; management of small-scale irrigation equipment; and vaccination campaigns for cattle. There was also collaboration between WFP and GoM on feeding children under five and pregnant or lactating women, as well as the school feeding program with training of school directors. Key agencies were engaged in post-cyclone assessments on food security and livelihoods across central provinces to measure the damages to agricultural and fisheries infrastructure and assets. WFP had plans to implement a follow-up drought focused FFA programme from November to March 2020. The programme was planned to further assist 225,000 food insecure drought-affected communities in three southern provinces of Mozambique by covering immediate food needs while supporting the creation and rehabilitation of community assets (WFP, 2019). Agencies also collaborated in the IPC analysis and post-disaster needs assessments, which informed the Humanitarian Response Programming, the Disaster Recovery Framework and resource mobilization (FAO, 2019e).

A key shift in the humanitarian landscape in Mozambique was the WFP supported agreement between the National Institute of Social Action (INAS) and the Ministry of Gender, Children and Social Action (MGCAS) to activate the Direct Social Support Programme (Programa Apoio Social Directo, PASD). Despite the government's long held stigma around use of cash interventions, this programme provisioned cash-based assistance to over 70,000 vulnerable households (WFP, 2019). This aimed to support the population through the lean season and to lessen expected acute food insecurity in the districts of Chibuto and Guija, Gaza Province.

## 5.5. Main constraints found in the food security HDN

In terms of longer-term food security response, a UN Economic Commission for Africa workshop deliberated options for "Building Back Better". This Commission emphasized interactions between government, NGO's, UN agencies and other international organisations. The workshop focussed on the need to improve resilience through skills building, better weather forecasting, and better reconstruction integrating climate information (UNECA, 2019). Organizations were already offering services to improve farmers' skills, encouraging them to use seeds that would be resistant to climate change, to diversify economic and agricultural practices and to improve their resistance to disasters (CARE, 2019).

Recommendations were also offered by all seven interviewees in order to address some underlying food security issues. Proposals included: greater crop diversification and rotation; improved management of soil fertility; use of pesticides; use of certified seeds; improvements to home and animal protection; and better emergency response plans. That said, the research uncovered some crucial constraints that limit food security HDN alignment, which are described in the following section.

### 5.5.1. Limited space created to integrate local knowledge

Participants expressed that the urgent nature of international humanitarian response meant that responders new to the region had to spend time understanding the terrain and context. The local NGO advisor observed that there seemed to be a void of skills and space in the international response mechanism to understand local context and integrate it into the initial response.

"*It was like seeing machinery. A lot of organisations came in, a lot of them know each other from other countries. They do their thing without asking the people, or the civil society. I got surprised that suddenly there are clusters everywhere, we as a local NGO [have worked here for] 24 years, we know the area and the access constraints etc. But new people, maybe very good, but not knowing the real local situation, country, and the language.*"
(Local NGO advisor)

An example of this was the immediate seed distribution response. Although the Irish NGO advisor shared a positive story about a small number of flood-affected farmers that received seed aid and were able to plant six weeks after the disaster, most other farmers were not this lucky. FAO were apparently unable to rapidly source and deliver additional and appropriate seeds in time to take advantage of this second agricultural season at a large scale. They had on hand an immediate supply of 2,000 seed distributions, which were hurriedly distributed by a few international agencies which already had operations up and running within these first six weeks. There was a worthy goal of supporting farmers to take advantage of the short agricultural season in April. These maize seeds, however, were not appropriate for the low-lying land available next to the river for cultivation in this season, and grounds remained saturated. Most farmers were not confident that planting would be fruitful, and either ate their seeds or kept them for the October main agricultural season. Some others who had managed to source and plant a few alternative legumes in this season were unfortunately affected by a Fall Army Worm infestation. The locals were not used to these pests, and it took agencies time, resources and additional training programmes to control the management of the infestation. Difficult as these conditions maybe, improved integration of local knowledge regarding appropriateness of skills to the season may have led to improved decisions regarding what was best to distribute to farmers in this early time.

### 5.5.2. Lack of DRR skills and disaster preparedness

An observation mentioned that could discourage international responders from creating space to integrate local knowledge was a belief that locals lack the technical agricultural skills for effective response and preparedness, especially given the strength of the disaster. This leaves Mozambique even further aid dependent as recovery programs become their new development

strategy. As a result, due to the high risk of yet another humanitarian crisis on the horizon in Mozambique, directly related to food insecurity and potential health outbreaks, the humanitarian community was called upon to retain experienced leadership in Mozambique (IASC, 2019). Thus, at the end of 2019, the clusters were still leading the country's food security response.

Three participants presumed that, should another disaster happen with the same magnitude as that of the Cyclones, Mozambique is likely to suffer similar devastating consequences. It was felt that there is a lack of basic structural infrastructure that would enable the country to prepare for another disaster of such intensity, or to support the development needs of the people. One Irish INGO participant focussed on the significant effort required on disaster risk reduction (DRR) that needs to be embedded across national and local government policies: "*Mozambique has been rocked like never before. If they don't learn their lessons and invest in serious disaster risk reduction, I would have to throw my hands up in despair*".

### 5.5.3. Language barrier

Three participants acknowledged that there was a severe lack of international staff who spoke Portuguese, let alone the local dialects in rural communities. As Welle (2018) reports, often illiterate and minority language speakers are left without access to life-saving information in international humanitarian responses. The agricultural consultant remembers providing translation services from English to Portuguese to some international staff, which was then translated to local dialects by another translator in talking to village chiefs in rural communities. The local NGO advisor confirmed that the only reason his local organisation managed to connect into the food security clusters initial response was that he could speak English: "*I couldn't see any big organisation able to speak Portuguese. Like this you can't communicate*." (Local NGO advisor). He observed the 'machinery' that was the logistical operations occurring around him and reached out to the cluster for engagement. From his perspective, there was important local knowledge regarding the location of communities, access paths and preferences that could have been of greater use to the initial response. It similarly would have enabled local communities to participate and influence their own recovery earlier.

### 5.5.4. Lack of localized participation and decision-making

When asked about involvement with local NGOs in the response period, the five participants from international agencies (both WPF participants and the three INGOs participants) claimed that local NGOs were generally incapacitated due to the disaster, even though many were still contracted to deliver aid packages.

The local NGO advisor, however, was frustrated by the little effort made by the international agencies to engage with local civil society. He felt that international organizations were reluctant to partner with local agencies to understand the local situation, with a deeper interest in saturated hotspots rather than geographically isolated pockets of communities. He did not perceive that enough investment was made outside of government directives. When challenged on shared decision making of local NGOs, both WFP participants defended that local agencies did not have the knowledge or the capacity to run large-scale operations and suffered from lack of resources. When asked about use of local organisations, three participants commented on contracting the delivery service of locals. This contrasts against Gomez's (2018) definition that the HDN is for aid providers to help locals realize humanitarian action that also aligns to their development goals. The WFP participant specifically commented that funds were not to be simply passed onto local NGOS to increase the capacity of local small-scale programmes: "*Well…We're not just going to give them all our funds".*

The local NGO advisor noted that even six months after the disaster, he saw little effort by the international aid agencies to deliver programmes directly with local NGOs. Through his contacts in Germany, he was able to source funding for the local NGO to deliver some recovery programmes. He asserts that without international connections, local NGOs just do not have the capacity to source or complete funding requests which are mostly offered in English. One exception to this was a comment from the local agricultural consultant, who assured that the Mozambican government has a strict policy of international organisations working with local organisations. It seems that the experience of the local organisation may depends on the nature the NGOs relationship with the government and goals of the organisation.

The Real Time Evaluation report on the Mozambique response shared by the IFRC (2019, p. 1) confirmed those perceptions. While long-term responses were generally perceived as efficient in this report, it also noted a lack of consideration of the local context to inform decision-making.

The report described that "future operations will benefit from exploring and introducing good practice of systematically capitalizing on existing contextual institutional and individual knowledge, to support informed decision-making" (IFRC, 2019, p. 1).

### 5.5.5. Bureaucracy

An observation from the Irish INGOs participants noted the continued growth of the 'machinery' of UN agencies well into the response activities. They noticed that although the cluster response is intended to be very operational, some dysfunction appears that has "*a lot to do with personalities and testosterone, despite all the processes*". They challenged the need for so many meetings and discussions, the great bureaucratic overhead that was observed at the operations centre, with many staff at desk jobs. They described the cluster system as "*a necessary evil; however, they need to leave after the first month*". Similar messages were delivered by the local NGO advisor and the German INGO participant, describing that once the food security cluster had established its first networks at the beginning of the response, it was very difficult to change. For example, if an agency such as Save the Children were delivering certain interventions in an area at the beginning of the response, there was little opportunity for other agencies to also support the same area. Such structures became quite rigid early in the process and remained so throughout the response period.

Even the WFP participant, the lead agency on the Food Security Cluster, identified that newly systemized bureaucracy held them back. Both WFP participants indeed noted that the beneficiary registration process, as described in section 5.4, took an extended amount of time. This registration and data collection process is a core part of contemporary humanitarian response, to be able to understand the number of affected people and manage humanitarian interventions accordingly. One of the key reasons for delays from WFP's perspective was the administrative overheads that came from new data privacy policies. NGOs were not able to quickly share registration details due to compliance constraints, which WFP considered as an increasing barrier to rapid response.

> "*The constraint was data sharing and data protection, this made data sharing very slow between NGOs and agencies. Every NGO has lawyers who are worried about privacy. However, these legal constraints and restrictions in practice has become a serious constraint to humanitarian response. So, we were waiting for*

*each cooperating partner - lots of INGOS - who told us they cannot hand over beneficiary data, even though our contract with them has a clause that beneficiary lists were required. We need to know this - to do basic planning - of course, we need the beneficiary lists. We need to know how many people are in which community and there is now some resistance to do that. That meant we were in a situation where we were in less control. We were facing risks - fraudulent behaviour etc, cards with barcode/fingerprint etc instead of a piece of paper. We were left in this situation for longer than necessary*." (WFP participant)

### 5.5.6. Government policy vs best practice humanitarian interventions

A delicate balancing act can be interpreted from interview responses between needs-based best practice humanitarian interventions and the prerogative of national government. Six out of seven interviewees reported difficulties in interacting with the government in Mozambique both before and during the emergency response.

Issues were raised regarding administrative constraints. The Irish NGO participant mentioned that "[the government] *likes to be in control of everything*", after noting that several aid agencies had closed their offices in Mozambique mostly due to difficult administrative and operating processes. Administrative constraints were also a key constraint of the response from WFP's perspective, who confirmed that there were at times significant delays in getting aid imports through Customs offices. This required greater coordination and management of the end to end supply chain.

It was understood from the outset that the Mozambique government did not condone the use of cash programming. The Irish NGO participant noted that this really made the response focussed on *"'traditional logistics"*. As described in the literature review, cash-based interventions are now such a fundamental part of humanitarian response, two participants observed that some agencies were *"lost"* in efficiently getting logistics programmes into action. This apparently challenged the international community, most of whom were now very accustomed to immediately mobilising cash programmes in environments. The Government of Mozambique did not grant cash interventions especially in the immediate response. The WFP participant stated that they negotiated the use of food vouchers with the government; however,

defining the exact mechanism of the food voucher system took several months. The Irish NGO participant felt that these delays did influence response momentum and effectiveness.

Different participants had diverging views on how the use of cash would have changed the effectiveness of the response. The Irish NGO participant felt that immediate cash interventions would have "*absolutely changed the nature of the response"*, as it was now an "*old school logistics"* response. There were certainly urban areas like Beira city where markets did recover earlier than rural areas, as well as camps for internally displaced people where cash could have achieved secondary goals above and beyond food aid. However, participants from WFP and the German INGO felt that cash would not have significantly impacted food security response, considering the large number of rural smallholder farmers who, even in usual times, did not have the means to be connected into markets. The local NGO advisor also raised concerns on the impact of cash on prices and level of corruption that pure cash programmes may have.

The effect of the relationship that local farmers have with their land was also relevant to the disaster response. All land is owned centrally in Mozambique and the government makes all the decisions regarding land use, sales and leases. After the disaster some displaced farmers who could no longer inhabit their land were *"allocated different land"* (Local NGO advisor). However, this land was not always ready for cultivation, containing debris or other having other blockers meaning farmers still could not plant. The government also heavily influenced the types of seeds distributed and continued a focus on maize production. This was challenged by the three INGOs participants, who managed to negotiate some greater diversification with the introduction of vegetable seeds to help combat increasing micro-nutrient deficiencies. In the long run, there is apparently little incentive for farmers to invest in their own land considering they are often not consulted when land rights are changed and are uncertain how government policy may impact any investments they make (Local NGO advisor, German INGO participant).

The relationship between local civil society organisations and the government was also discussed by participants. According to the local NGO advisor, there is a perception that a high amount of corruption influences governmental operations. He, and the Irish NGO participant were both aware of reports that food aid had reached some state employees and their communities before distributions to the most vulnerable. It was summarised that there was little trust between local NGOs and the government, even before this disaster, meaning there

were not many programmes that connected the vast number of associations to government operations.

## 5.6. Summary

This chapter reported the Cyclones' impact on food security and the food security response based on information shared in interviews and from the online documents. On the one hand, there was a general acknowledgement amongst participants that the initial humanitarian response to the Cyclones was of high quality, and that a great amount of losses was avoided. On the other hand, once digging deeper and analysing issues in the food security HDN, many issues emerged that restrict HDN alignment. These constraints included: (1) a lack of space to integrate the local context; (2) the lack of DRR skills and local preparedness; (3) communication issues relying on language, which created an immediate distance between locals and responders; (4) a lack of empowered local participation in the humanitarian interventions; (5) bureaucracy which impaired the fluidity of managing aid distributions; (6) the lack of efficiency of government activities, with high levels of rigidity and policies that conflict with best practice.

Overall, these constraints inhibit the ability of local affected people to act with self-determination and self-sufficiency. The next and final chapter discusses these findings further in the context of the HDN and concludes that there is still much more to discover in the food security HDN.

# 6. Chapter Six: Discussion - a humanitarian-development wall rather than a nexus

## 6.1. Introduction

Humanitarian and development interventions, despite being naturally linked, are often practiced in siloes. There is a need for these interventions to interact at a deeper level to improve their efficiency (Murphy et al., 2018). This research aimed to describe the food security HDN in response to disasters and investigate its main constraints. First, a literature review presented key constraints and opportunities in the food security HDN. Second, this literature review was exemplified by a case study using publicly available documents, as well as experiences and reflections of a small panel of responders to Cyclones Idai and Kenneth, which hit Mozambique in March 2019. This final chapter discusses the findings and insights from the case study in light of the key findings in the literature review. It first explains the difficulties for humanitarian interventions to converge with development goals. It then provides recommendations on how to overcome those challenges. It finishes with a few concluding remarks that the wall that divides humanitarian and development programming in food security needs further investigation, specifically how key values of food sovereignty could provide a better framework for development outcomes in the HDN.

## 6.2. Humanitarian-Development Nexus or Humanitarian-Development Wall?

The effectiveness of emergency food security interventions has evolved over time as responders better understand how vulnerable people and communities engage with food systems in crisis situations. Responders addressing acute hunger have made significant progress in their understanding and alignment of response activities to also work towards longer term food security (Clapp, 2014). Traditional humanitarian food aid providers such as WFP (2018b) have acknowledged that their historic focus on importation of aid did not pave the way for stabilized food security. WFP's expanded allocation of varying social protection mechanisms such as cash grants, vouchers, and formal / informal market access accelerate recovery and have been shown to help minimize future humanitarian needs (Maxwell et al., 2008). Responders are also prioritising investments in collaborative tool sets such as joint assessments, planning and

programming and improved data sharing, including establishing measurement and monitoring systems to inform policies.

However, the food security HDN in disaster response still holds many opportunities to direct aid investments to better achieve longer-term food security goals. The literature review presented that certain development perspectives can be excluded from humanitarian responses. This can be understood through the global decline in agricultural expenditure and underinvestment in disaster preparedness (WFP, 2006); delayed release of post-disaster development financing (FAO (2010b); as well as a reluctance to uncover local development contexts with enough local participation (Christopolos, 2006). In this line, the food security HDN could benefit from reflection of food sovereignty values and frameworks, where the local people define and control their own food and agriculture systems (Clapp, 2015). Some drivers for greater HDN have been prompted, such as the Grand Bargain and Building Back Better initiatives (IASC, 2016). The slow realization of these targets, however, suggests that those on the ground in humanitarian contexts are uncertain where to start (TNH, 2019).

This case study analysed the food security HDN and summarises that a wall still exists between humanitarian action and development outcomes. A key part of this wall is in the framing of 'development' itself, and the researcher suggests that international responders start from a place where the desires of local people drive development goals, as proposed by key food sovereignty values. Most participants in this research believed that Mozambique, at the time of the interviews about six months after the disaster, was no closer to being ready to manage large-scale disasters. In fact, at the time of writing, the same provinces that were devasted by the Cyclones were affected again one year later by flash flooding, including many of the areas used for resettlement after the Cyclones (UNOCHA, 2020). The HDN in least developed countries and high disaster risk countries such as Mozambique does should not be a one-time analysis, however, form a key part of ongoing long-term humanitarian and development planning and collaboration.

Except for under-spending in agricultural response, the other three constraints impeding food security HDN mentioned at the conclusion of the literature review were evident in this case study. Primarily concerned by immediate top-down mechanical response driven by life-saving goals, humanitarian interventions are not geared to focus humanitarian response based on the development context (Audet, 2015). Response activities are always restricted in time and

resources in the immediate aftermath of disaster and in the initial recovery period. However, the HDN agenda asks, at each point in the response, what more could be done? In this response, a lot more could be done to better frame development goals of the people, as opposed to the government. It was difficult to identify examples of how local needs and local participation informed the response to the Cyclones.

Participants did not directly mention delayed release of post-disaster development financing as a key constraint in Mozambique food security recovery. The high impact of bureaucracy, as well as rigid and ancient practices from the government, however, are clearly described as delaying the rapidity and fluidity of development practices. Implicitly, participants reported the absence of the government's pivotal role to allow a better transfer between humanitarian and development skills and break the wall that exists between humanitarian and development activities. UN agencies who have a long-term relationship with the government (for example, participating in annual development programs with government agencies) are clearly in a strong position to take a strategic lead in response. A noteworthy success in the food security HDN after the Cyclones is WFPs perseverance in use of cash payments as the response transitioned to recovery. This shows how aid providers, armed with belief in the development goals of cash interventions, can facilitate change that results in a changed development landscape for local people. Through continued advocacy and sharing of success stories regarding cash programming, WFP were able to leverage the trust they have developed with the government to introduce these controlled and small-scale interventions that can better achieve recovery goals. This further connects government policy to good practice humanitarian and development interventions. It is too early to see if a similar approach will be possible with the introduction of better preparedness and disaster risk reduction programs that were being proposed and reviewed.

The language barrier and the lack of local technical agricultural skills are likely factors that contributed to minimal local participation. Based on the case study however, there was also what seems to be a clear denial of local involvement in the humanitarian response. Of note, the UN agency participants did not identify the lack of local civil society engagement as a key constraint in the success of the response. Rather, there was a hard focus on logistics, efficiency, and data collection. This reflects the structural attribute of humanitarian interventions, the success of which is reflected by the number of 'beneficiaries' targeted for aid support, the cost of the interventions, and the number of beneficiaries actually reached. This

could metaphorically be compared to life saving emergency interventions in a medical context. Interventions are mostly driven by general knowledge of the body, rather than the person. Humanitarian interventions respond to the same constraints: the local context is not as important as general knowledge of effective humanitarian response mechanics, rapid assessment of the disaster, availability of goods and how goods will be delivered, and of course, funding. When asked about how local people could have helped, representatives of UN agencies and INGOS were dubious, stating that their knowledge of food assistance effectiveness required significant capacity building, insinuating their help would not significantly change the success of the response. It appears there is little room for confrontation and debate regarding local participation for humanitarian interventions in disaster relief and recovery, where success is defined by good management and top-down leadership.

### 6.3. Breaking the wall

The challenge is not an easy one. Food security is complex and influenced by numerous local, national and international factors. Humanitarian response is complex, and any improvements need to ensure that the life-saving goals of activities is not compromised. A key reflection based on the results of this case study is the under-stated role of food sovereignty as an HDN development framework. In addition, the opportunity to coordinate partnerships between government and local people across the disaster response phases could emerge as a powerful food security HDN tool. This section describes a way to break the wall between humanitarian interventions and development goals by promoting ownership and empowerment of the local people.

By definition, the HDN is incompatible with siloes. There is a need to transform siloed funding and policy structures to allow early release of funds, enabling humanitarian action to be better supported by development actors. Likewise, needs assessments providing in depth understanding of the local development ecosystem have to transcend aid sector silos to include local community, governance and pre-disaster development actors. These assessments can inform not only long-term needs but also proven strengths of the local community. Local people must be put at the centre of policies even if it challenges existing mainstream development trajectories that rely too much on top-down rather than bottom-up insights. This can be achieved for example by calling for livelihood recovery plans that nurture a balanced mix of local production and consumption versus export led strategies.

The researcher proposes that the food security HDN could be better framed by the principles of food sovereignty. One practical implication of this could be enlightening Maxwell et al.'s (2008) list of best practice food security humanitarian interventions by differentiating the development goals of local people and that of the government. Although the constraints of this limited research study could not further investigate this issue, the researcher suspects that joined needs assessments greatly reflect how government policy affects development goals, rather than truly understanding the local and community goals of farmers. Farmers themselves are restricted in terms of options based on the pricing and purchasing policies of the government. The tension between national governance and control and local goals is not addressed in Maxwell's list of intervention advantages and disadvantages and is only lightly present in humanitarian handbooks such as the Sphere Humanitarian Charter (Sphere, 2018). Mozambique hosts a large number of local smallholder farming communities with strong food sovereignty movements and associations. The international food security humanitarian community who regularly bring their 'machinery' in and out of Mozambique could give these local voices much greater power in determining their food systems than they are currently attributed.

There is also a need to gradually decentralise decision making away from UN agency and government control over time as life-saving activity decreases and transfer responsibilities to local communities. Specifically targeting the integration of local civil society organisations may better represent communities than government organisations. UN agencies and INGOs may better deliver to HDN goals by negotiating with government decision makers the inclusion of local community organisations into decision making and considering genuine partnership opportunities early in the response period. One option could be to always have a liaison officer in charge of engagement and communication with local organisations for each cluster. It would be essential that this person speaks at least the national language, and ideally the language of local affected communities. An alternative proposal for the development advisor was that key decisions should be finalised at the local level by committee. The committee should be a representation of local government, village leaders and community representatives, and aid agencies. In this way, the local context had to be a critical component of what was considered.

Mostly, development actors and proponents of food sovereignty values have a responsibility to step up to their role and fight for effective policies that influence future generations, especially

in the context of accelerating hunger in communities already suffering impacts from climate change. All actors must acknowledge that food security policy is often written in the aftermath of disasters, especially for least developed countries, and be motivated to inform policy decisions. Through the example of introduction of cash interventions in the Cyclones recovery period in Mozambique, it is clear that coordination of strategic partnerships and advocacy can allow lead agencies to facilitate a new aid development landscape in the aftermath of a disaster. Coherence between government initiatives and humanitarian interventions is a crucial goal for the HDN (FAO, 2019b). Further investigation regarding how disaster response and recovery should be an impetus for structural change, especially in the area of food sovereignty, could reveal even greater opportunity in the food security humanitarian-development nexus.

## 6.4. Concluding remarks

The aim of this research was to explore the humanitarian-development nexus and its main constraints by focusing on the impact of humanitarian response to disasters on longer-term food security. The researcher proposes that food sovereignty values could better inform the understanding of the food security HDN that is motivated by localized action and decision making. Community driven goals is critical to achieve the type of sustainable development. Development, by nature, reflects deep understanding of the local context, skills of the population, and locally led coherent assistance. Time is needed to communicate, exchange different points of view, gather data, understand the skills and knowledge.

Along with the overlapping transition of life-saving, recovery, rehabilitation and preparedness activities at different points in time across the disaster response lifecycle, there are two key HDN takeaways: (1) responders need to be prepared to deliver food security interventions targeting HDN that are better informed by the national development context and by the goals of local communities. The level of development across all measurements constrains the effectiveness of various interventions, and responders need to be better equipped for this reality. Food sovereignty is offered by the researcher as a framework that could help food security responders with adopting this recommendation. (2) Agile coordination and advocacy of government and local stakeholders is an area of HDN focus for international responders, including re-assessing how to adapt these structures as the recovery matures, swiftly moving from 'the machinery' into an inclusive facilitator that puts local people at the heart of operations.

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## Annex – Example interview questions

- How long have you or did you, or your organization, work in Mozambique?
- Which food security humanitarian interventions were you part of for Idai and what was your role?
- How did humanitarian interventions evolve during the response period to date?
- What key information did you use to determine response programming?
- Did you or your organization participate in any joint need's assessments or intervention strategies?
- How relevant was ensuring long-term food security to your role in the response?
- How did previous knowledge regarding local context influence the food security response?
- How well do you feel the post-disaster joint needs assessment reflected long-term food security goals?
- What was the level of contribution from local responders in programming the food security humanitarian interventions?
- What are the constraints to greater involvement of local organizations in decision making regarding food security interventions?
- Did you see any discrepancies between needs identified early in the response?
- How well have different clusters / sectors shared information and needs assessments
- What additional information would have allowed for better tailored interventions? Would this have made a significant difference to longer-term food security?
- Did existing funding structures support new ways of working and collaboration with local NGOs?
- What improvements did you see in this response regarding longer-term food security compared to previous experiences?

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